TRADE FACILITATION, VALUE CREATION, AND COMPETITIVENESS: POLICY IMPLICATIONS FOR VIETNAM'S ECONOMIC GROWTH

VOLUME 1

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July 15, 2013
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Cover photo: Supply Chain Vietnam
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FOREWORD

Trade plays a particularly important role in contributing to the economic growth of Vietnam. The country’s rapid trade growth during the past two decades has been built on international economic integration process -- lower barriers to trade and participation in agreements with trade partners. However, with this progress in international commitments well advanced, the advantages of trade liberalization in contributing to the growth of trade are reaching their limits. It is time to have a new approach to improve trade competitiveness and export growth.

The study “Trade Facilitation, Value Creation, and Competitiveness: Policy Implications for Vietnam’s Economic Growth” is an activity under the World Bank-funded technical assistance program to support the formulation and the implementation of the National Action Plan for trade competitiveness enhancement in Vietnam. The program has been carried out in collaboration with Office of the National Committee for International Economic Cooperation (NCIEC) to help Vietnam formulate and implement activities to enhance trade competitiveness, especially in the context of global crisis, and at the same time improve the efficiency of international economic integration.

I must welcome and am highly appreciative of the close collaboration between the World Bank in Vietnam and Office of the NCIEC in this and the past endeavours. I believe that the continued cooperation and support of the World Bank will contribute to promote the economic development of Vietnam.

Vu Van Ninh
Deputy Prime Minister
Chairman, National Committee for International Economic Cooperation
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This report was prepared by a World Bank team led by Duc Minh Pham and consisting of Deepak Mishra, Kee-Cheok Cheong, and John Arnold under the guidance of Shudhir Shetty and Victoria Kwakwa.

This report is a product of a comprehensive study “Trade and Transport Facilitation Assessment” (TTFA) funded by Trust Fund TF097373 under the umbrella of the World Bank-managed Trade Facilitation Facility (TFF). The general objective of this study is to identify ways to improve the competitiveness of Vietnam’s exports. The challenge facing Vietnam is not only reducing the cost and time of logistics for its exports but also restructuring its supply chains to add value to its exports and to promote trade in higher value goods. The study supports activities that can bridge the policy gap in trade and logistics facilitation and assist the formulation of a national trade facilitation strategic plan. The strategy, when implemented, will enhance Vietnam’s competitiveness and sustain productivity-based growth.

An endeavor of this breadth and detail cannot succeed without the contribution of many people. The team is grateful to the following for contributing to the writing of this report: Thomas Farole, Gerard McLinden, Jose Barbaro, Jean-Francois Gautrin, Trinh Minh Anh, Nguyen Luong Hien, Ngo Thi Ngoc Huyen, Nguyen Duc Tri, Nguyen Thi Phuong Hien, Nguyen Thi Diem Hang, and Nguyen Ngoc Anh.

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The study benefited from editorial and administrative support from Ibrahim Ndoma, Mara Baranson, Charles Warwick, Vu Thi Anh Linh, and Le Thi Khanh Linh.
This report consists of three volumes. The first, the Summary Report captures the salient features and key messages of the entire study. Volume 1 provides the detailed analysis of the themes while Volume 2 contains case studies of trade facilitation of six industries.

The summary report brings together the main features of trade facilitation. It views trade facilitation as having three main components -- trade-related (“hard infrastructure”), regulatory and organizational framework (“soft infrastructure”), and supply chain organization. These components are considered against the context of changes in Vietnam’s trade environment, as well as function within the country’s institutional framework. The strengths and deficiencies of these components are highlighted and the role of government in capitalizing on these strengths while addressing weaknesses discussed. A summary of recommendations concludes the report.

Volume 1 consists of the detailed analytical discussion from which conclusions are drawn and recommendations made. Chapter 1 presents the conceptual framework for the analysis, beginning with characterizing trade facilitation and demonstrating how different parts fit together to have an impact on export competitiveness. Chapter 2 provides the context of Vietnam’s trade dynamics, showing why, despite a current robust export performance, Vietnam needs to take trade facilitation seriously. Chapter 3 depicts the country’s performance in this area, identifying performance gaps to show the scope for improvement. Chapters 4 to 6 provide detailed discussion of the “pillars” of trade facilitation. Chapter 4 examines the state of Vietnam’s trade related infrastructure in terms of the major transport nodes. Chapter 5 outlines the regulatory framework for cross-border trade. This is viewed from the perspective of the domestic economy as well as Vietnam’s trade facilitation commitments from agreements with other countries, especially the ASEAN grouping of which it is a member. Chapter 6 explores the role and state of supply chains in Vietnam. This is an important area for trade facilitation, but one in which little work has been carried out. The discussion consolidates surveys of six subsectors undertaken specifically for the study. Chapter 7 discusses the institutional framework within which the pillars of trade facilitation function. This framework has macro-, mezzo-, and firm-level dimensions. The final chapter summarizes the many policy recommendations to address the deficiencies identified in the preceding chapters. A policy matrix matches deficiencies to remedies.

Volume 2 contains case studies of supply chains for six subsectors -- three manufacturing and three agricultural. The manufacturing subsectors are textiles and garments, footwear, and electronics and electrical equipment. The agricultural/aquaculture subsectors are rice, coffee and seafood. All these subsectors have experienced healthy export growth but each has weaknesses in its supply chain.
<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>ACFTA</td>
<td>ASEAN-China Free Trade Area</td>
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<td>AAPEC</td>
<td>Asia-Pacific Economic Cooperation</td>
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<td>3PL</td>
<td>Third-party logistics</td>
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<td>ADB</td>
<td>Asian Development Bank</td>
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<td>AEC</td>
<td>ASEAN Economic Community</td>
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<td>AEO</td>
<td>Authorized Economic Operator</td>
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<tr>
<td>AFTA</td>
<td>ASEAN Free Trade Area</td>
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<td>ASEAN</td>
<td>The Association of Southeast Asian Nations</td>
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<td>ASEAN/EE MRA</td>
<td>ASEAN Electrical and Electronic MRA</td>
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<td>ASEM</td>
<td>The Asia-Europe Meeting</td>
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<td>ASW</td>
<td>ASEAN Single Window</td>
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<td>ASYCUDA</td>
<td>The Automated System for Customs Data</td>
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<td>ATIGA</td>
<td>ASEAN Trade in Goods Agreement</td>
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<td>B2B</td>
<td>Private-to-Private sales</td>
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<td>BPR</td>
<td>Business Process Reengineering</td>
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<td>CIF</td>
<td>Cost Insurance and Freight</td>
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<td>C/O</td>
<td>Certification of Origin</td>
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<td>CEPT</td>
<td>Common Effective Preferential Tariff</td>
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<td>CHA</td>
<td>Cadastral and Housing Agency</td>
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<td>CIEM</td>
<td>Central Institute for Economic Management</td>
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<tr>
<td>CMIT</td>
<td>Cai-Mep International Terminal</td>
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<tr>
<td>CMT</td>
<td>Cut, Make, Trim</td>
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<td>DWT</td>
<td>Deadweight tonnage</td>
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<td>ECA</td>
<td>Export Credit Agencies</td>
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<td>ECE</td>
<td>Economic Commission for Europe</td>
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<td>Export-led Growth</td>
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<td>The Enabling Trade Index</td>
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<td>EU</td>
<td>European Union</td>
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<td>FDI</td>
<td>Foreign Direct Investment</td>
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<td>The Focal Economic Zones</td>
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<td>FOB</td>
<td>Free-on-board</td>
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<td>FTA</td>
<td>Free Trade Area</td>
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<td>G2G</td>
<td>Government-to-Government</td>
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<td>General Agreement on Tariffs and Trade</td>
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<td>General Department of Vietnam Customs</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GMS</td>
<td>The Greater Mekong Sub-region</td>
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<td>GSO</td>
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<td>HACCP</td>
<td>Hazard Analysis and Critical Control Points</td>
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</table>
HCMC  Ho Chi Minh City
HRD  Human Resource Development
ICDs  Inland Container Depots
ICE  Inter-continental Exchange
ICT  Information and Communication Technology
IPR  Intellectual Property Rights
ISO  International Standardization Organization
IWT  Inland Waterway Subsector
JBIC  Japan Bank for International Cooperation
JSC  Joint Stock Company
KPIs  Key Performance Indexes
Lao PDR  Lao People's Democratic Republic
LPI  The Logistics Performance Indicator
LSCI  The Liner Shipping Connectivity Index
MARD  Ministry of Agriculture for Rural Development
MNCs  Multi-national Corporations
MOF  Ministry of Finance
MOH  Ministry of Health
MOIT  Ministry of Industry and Trade
MOSTE  Ministry of Science Technology and Environment
MOT  Ministry of Transport
MPI  Ministry of Planning and Investment
MRAs  Mutual Recognition Arrangements
NAP  National Action Plan
NCIEC  National Committee for International Economic Cooperation
NH  National Highway
NSW  National Single Window
NTBs  Non-tariff Barriers
OECD  Organization for Economic Co-operation and Development
OBM  Original Brand Manufacturer
OEM  Original Equipment Manufacturer
ODM  Original Design Manufacturer
PAD  Project Appraisal Document
PCA  Post Clearance Audit
PPP  Public-Private Partnership
PRC  People's Republic of China
SECURE  Standards Employed by Customs for Uniform Rights Enforcement
SEDS  The Socio-Economic Development Strategy
SITC  Standard International Trade Classification
SMEs  Small and Medium-Sized Enterprises
SNP  The Saigon New Port
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOE</td>
<td>State-Owned Enterprise</td>
</tr>
<tr>
<td>SPCD</td>
<td>Strategic Program of Customs Development</td>
</tr>
<tr>
<td>SPS</td>
<td>Sanitary and Phytosanitary</td>
</tr>
<tr>
<td>TBT</td>
<td>Technical Barriers to Trade</td>
</tr>
<tr>
<td>TDI</td>
<td>Transport Development Strategy Institute</td>
</tr>
<tr>
<td>TEU</td>
<td>Twenty-Foot Equivalent Unit</td>
</tr>
<tr>
<td>TFP</td>
<td>Total Factor Productivity</td>
</tr>
<tr>
<td>TTFA</td>
<td>The Trade and Transport facilitation Assessment</td>
</tr>
<tr>
<td>TRIMS</td>
<td>Trade Related Investment Measures</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference for Trade and Development</td>
</tr>
<tr>
<td>UNESCAP</td>
<td>The United Nations Economic and Social Commission for Asia and the Pacific</td>
</tr>
<tr>
<td>US BTA</td>
<td>Bilateral Trade Agreement between Vietnam and the United States</td>
</tr>
<tr>
<td>VASS</td>
<td>Vietnam Academy of Social Sciences</td>
</tr>
<tr>
<td>VAT</td>
<td>Value Added Tax</td>
</tr>
<tr>
<td>VCCI</td>
<td>Vietnam Chambers of Commerce and Industry</td>
</tr>
<tr>
<td>VCIS</td>
<td>Vietnam Customs Information System</td>
</tr>
<tr>
<td>VDB</td>
<td>Vietnam Development Bank</td>
</tr>
<tr>
<td>VDR</td>
<td>Vietnam Development Report</td>
</tr>
<tr>
<td>VFA</td>
<td>Vietnam Food Association</td>
</tr>
<tr>
<td>VNR</td>
<td>Vietnam Railway</td>
</tr>
<tr>
<td>VNRA</td>
<td>The Vietnam National Railway Administration</td>
</tr>
<tr>
<td>WB</td>
<td>The World Bank</td>
</tr>
<tr>
<td>WCO</td>
<td>The World Customs Organization</td>
</tr>
<tr>
<td>WEF</td>
<td>The World Economic Forum</td>
</tr>
<tr>
<td>WITS</td>
<td>World Integrated Trade Solutions</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
The conceptual framework for this study takes as its starting point the World Bank’s definition of trade facilitation. This deals with both the hard and soft infrastructure needed to support trade, but extends it to include the role of supply chains. These three “pillars” function within a multi-level institutional framework to lower the time and money cost, improve reliability and capture higher value added for export activities -- all of which ultimately enhance the country’s trade competitiveness. This framework elaborates the export-led growth model highlighted in the Social and Economic Development Strategy 2011-2020 and the World Bank’s Vietnam Country Partnership Strategy 2012-2016.

1.1 Supply Chains, Trade and Logistics Facilitation, and Competitiveness

Trade and Logistics Facilitation as a Major Competitiveness Factor

The relationship between trade and growth has been the focus of researchers and the development community for several decades, evolving into a wide body of theoretical and empirical work. One of the most widely cited and used models to explain the Asian development path has been the export-led growth (ELG) approach, usually associated with a rapid and constant expansion of net exports, high savings rate, and sustained GDP growth. Despite extensive research, the debate in Asia over the ELG model is undecided.

Regardless of the specific linkages and causality between exports and growth, it is widely accepted that trade plays a vital role in most economies. Evidence shows that high GDP growth episodes are invariably accompanied by a surge in exports (Siow-Hooi Tan et al., 2007; Jie Yang, 2008). The performances of Hong Kong SAR (China), Singapore, Korea, Malaysia, Thailand, and more recently China, are usually cited as examples of high growth with rapid expansion of export flows. In Vietnam, GDP growth rates averaged approximately 7.5 percent for the last two decades, while exports expanded at an annual average of 20 percent during the same period.

But what drives export growth? Trade theories will argue in terms of ‘competitiveness’ through comparative advantage derived naturally from factor endowments or created by government policies. However,
comparative advantage is argued primarily from the perspective of production cost with the assumption that trade is frictionless. In practice, this is only partly true, because the movement of goods from production location to ports and other gateways as well as associated procedures can entail significant money and time costs. This study focuses on trade facilitation as an important mechanism for reducing these costs and increasing export competitiveness.

Trade facilitation has been variously defined. The World Trade Organization (WTO) defines trade facilitation as "the simplification and harmonization of international trade procedures", including the activities (practices and formalities) involved in collecting, presenting, communicating and processing the data required for movement of goods in international trade (ESCAP, 2002). Other international organizations such as the Economic Commission for Europe (ECE), UNCTAD and APEC have different definitions, which emphasize other aspects of trade facilitation.

Table 1.1: Definitions of Trade Facilitation

<table>
<thead>
<tr>
<th>Organization</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTO and UNCTAD</td>
<td>“simplification and harmonization of international trade procedures including the activities, practices and formalities involved in collecting, presenting, communicating and processing the data required for movement of goods in international trade.” (WTO, UNCTAD, E-Commerce and Development Report, 2001, p.80)</td>
</tr>
<tr>
<td>OECD</td>
<td>“simplification and standardization of procedures and associated information flows required to move goods internationally from sellers to buyers and to pass payments in the other direction” (OECD, TD/TC/WP(2001), John Raven)</td>
</tr>
<tr>
<td>UN/ECE</td>
<td>“comprehensive and integrated approach to reducing the complexity and cost of the trade transactions process, and ensuring that all these activities can take place in an efficient, transparent, and predictable manner, based on internationally accepted norms, standards, and best practices.”</td>
</tr>
<tr>
<td>APEC</td>
<td>“trade facilitation generally refers to the simplification and harmonization, use of new technologies and other measures to address procedural and administrative impediments to trade.” (APEC Principles on Trade Facilitation, 2002).</td>
</tr>
<tr>
<td>APEC</td>
<td>“trade facilitation is the use of technologies and techniques which will help members to build up expertise, reduce costs and lead to better movement of goods and services”(APEC Committee, 1999)</td>
</tr>
</tbody>
</table>


Sohn (2001) defined trade facilitation as “all activities or policies that reduce transaction costs arising from eliminating or simplifying excessive and complex procedures, practices and processes related to trade, thus increasing efficiency, which results in increased trade.” Staples (2002) gave another definition that “trade facilitation involves reducing all the transactions cost associated with the enforcement, regulation, and administration of trade policies.” As such, the objective of trade facilitation is to “reduce the cost of doing business for all parties by eliminating unnecessary administrative burdens associated with bringing goods and services across the borders.”

Despite slight differences, all these definitions have a common statement that trade facilitation involves the simplification or harmonization of import-export procedures, e.g. customs procedure and license, technical standard, safety and health standard, etc. Presenting a comprehensive viewpoint, Chan-Hyun Sohn and Junsok Yang (UNESCAP) divided trade facilitation activities into two major groups: (i) management
procedures, especially administrative procedures; and (ii) transportation, logistics, assurance, payment method and other financial procedures. In modern trade, this also includes e-commerce transactions.¹

The World Bank adopted a similar viewpoint, stating that trade facilitation includes not only factors such as reducing and abolishing tariffs and simplifying customs procedures as well as regulations on origin, quality, but also factors such as enhancing the business environment, improving the quality of infrastructure, and increasing the transparency of the legal system. All these factors have an impact on export capacity of a country by reducing production cost of goods exported. Trade facilitation measures can be considered in two dimensions: (i) investment in “hard” infrastructure (including highways, railroads, ports, and information infrastructure) and (ii) investment in “soft” infrastructure (including transparency, customs efficiency, border management, business environment and other institutional reforms).²

This approach seems to be most relevant to Vietnam for the following reasons. First, export-led growth remains one of the key directions in the Social and Economic Development Strategy 2011–2020. Second, Vietnam consistently follows a policy of openness, successfully integrating into the global economy by joining international economic organizations such as WTO, ASEAN, APEC, and ASEM as well as signing Free Trade Agreements with many international trading partners. Third, while recently becoming a middle-income economy is a significant achievement, it poses new challenges. Although it must still make considerable progress to achieve a high-income status, there is concern that unless these challenges are overcome, Vietnam is in danger of falling into the middle-income trap, a fate that has befallen many other economies long before they reach the high-income threshold (Gill and Kharas, 2007).

But with healthy economic growth and booming exports, should Vietnam be concerned? One reason is the existence of economic vulnerabilities (World Bank 2012). Another has to do with the nature of export growth. The rapid growth of exports in Vietnam was underpinned by the removal of trade barriers, both tariff and non-tariff, during the reform process. This allowed Vietnam to utilize its comparative advantage of low labor cost. At the same time, trading partners, existing and potential, allowed Vietnam greater access to their markets with relatively few restrictions. As the economy boomed and wages rose, the labor cost advantage decreased, while improvements in productivity were slow to materialize. Although conventional barriers to trade (tariffs, quantitative restrictions and NTBs) have been substantially reduced in the last decades, it is becoming more difficult to realize additional gains through these means.

The structure of Vietnam’s trade leaves room for improvement. Exports are dominated by products embodying low technology and little value added. Manufactured exports also have high import content. Both exports and imports are geographically concentrated.

With these challenges and trade liberalization offering limited opportunities for future export growth, the costs associated with trade logistics and trade facilitation have emerged as a significant factor affecting competitiveness in Vietnam. The costs for trade logistics, including transport, have an impact on trade similar to tariffs. Therefore, emphasis in reducing these costs is a priority to increase trade competitiveness.

Effective logistics reduces the cost of distribution of goods thereby increasing the competitive advantage of the producer. The impact is greatest for global trade because logistics account for a larger proportion of the delivered time and cost for exports. As a result, the structure of global supply chains has become a key source of competitiveness and trade facilitation has an important role in restructuring the supply chain.

1.2 Determinants of Trade and Logistics Facilitation Performance and the Role of Supply Chain Restructuring

Improvements in trade competitiveness can be divided between increases in the value of the goods that are exported and increases in productivity. Figure 1.1 elaborates in a simplified manner the key determinants of trade logistics and facilitation, including (i) transport and logistics services; (ii) regulatory procedures for trade; and (iii) supply chain organization as factors enhancing trade competitiveness.

While all these factors are covered in this study, particular attention will be devoted to enhancing the effectiveness of supply chain organization and transport and logistics systems. Effective leverage of supply chains is of strategic importance to Vietnam, permitting capture of value added within a time frame considerably shorter than the more commonly proposed strategy of shifting the structure of industry towards the production of higher value added goods. This does not mean that this shift is unnecessary. Indeed, there is no alternative to industrial restructure over the long-term. Leveraging supply chains captures value added in the interim while long-term restructuring, which may have adverse short-term adjustment costs, takes place. This interim approach also allows Vietnam to continue to leverage its comparative advantage, especially its abundant supply of low-cost labor.

The determinants listed above constitute the three pillars of trade logistics. The first pillar, transport and logistics services, relates to the physical trade flows. It includes the transport services and the equipment and infrastructure used for each mode. Both the domestic movements, which typically use land transport, and the international movements, which use air and ocean transport, are covered. The pillar also includes the services, equipment and infrastructure used for transfer between transport services, both intra-modal and inter-modal. For domestic movements, these include primarily rail yards and truck terminals, but also coastal seaports. For international movements, these are primarily international seaports and airports. The measurement of the performance for this pillar covers the time and cost for single and multiple mode movements as well as the coverage and availability provided by the transport network. Coverage refers to accessibility to the primary network while availability refers to frequency and regularity of service.
The pillar also includes all non-transport logistics services. The most common is storage but complementing this are services that typically occur at a storage facility, e.g. consolidation, packaging and labeling, inventory management, assembly, and customization. Another common service is clearing and forwarding, which involves arrangements for the movement of goods between countries, including completing customs procedures and meeting import and export standards. In addition, this also includes financial services such as cargo insurance and trade finance. These are usually offered as bundled services.

Therefore, it is not only the provision of infrastructure that limits the efficiency of trade logistics (as is often perceived) but also the quality and variety of publicly and privately provided services. Two important conclusions emerge. The first is that analyses and recommendations on the issue should not be limited to infrastructure bottlenecks, but should also consider the logistics services that utilize this infrastructure. The second is that the efficiency of trade logistics systems depends on the coordinated effort of stakeholders both in the public and the private sectors. Key actors in this pillar include the service providers at the domestic and international gateways and corridors. Key performance indicators (KPIs) measure connectivity, logistics costs, and customer satisfaction.

The second pillar, trade regulatory procedures, is the set of procedures and related services required for movement of goods across borders. These include collection of duties and taxes, enforcement of trade agreements, and restrictions on trade in goods that affect public health and safety, among others. Trade facilitation refers to the removal of obstacles such as excessive documentation, cumbersome or inconsistent procedures, and significant informal payments. These obstacles result not only from poor management and lack of transparency, but also from inadequate infrastructure, limited use of ICT to automate procedures, and limited application of risk management techniques. The principal actors in this pillar are trade regulators and customs and other border control agencies, including those enforcing regulations related to agriculture, health, standards, drugs, security and migration. Performance indicators include formal and informal costs per shipment, the percentage of shipments subjected to physical inspection, and average clearance time (including and excluding delays attributable to the cargo owner). Key actors in this pillar include border trade management agencies such as Customs, Agriculture, Health, Anti-Narcotics, Migration, etc. Key performance indicators measure connectedness, the cost of logistics, and customer satisfaction.

The third pillar, supply chain organization refers to the structure of the supply chain. The most important performance measures are the time, cost and reliability of delivery. These are measured using KPIs such as order cycle (initial and restocking), inventory turnover, order fulfillment, and cash-to-cash cycles. Improvements in performance increase the value of goods delivered through the value chain. The supply chain can also be restructured so more of the value addition activities are performed within the country. For example, the chain can be extended backwards so that some of the processing of the imported inputs is performed in Vietnam. Similarly, the chain can be extended forwards so that the exports are processed to the point where they can be shipped directly to the final point of sale.

These improvements are usually addressed as part of the analysis of a products value chain as shown in Figure 1.2 for apparel. However, each of the activities are linked through a supply chain which determines where these activities take place as well as the total time and cost for delivery of the goods produced. As indicated in the World Bank’s Trade Competitiveness Diagnostic Toolkit (2012), this framework could cover key components of the factor input and factory-gate competitiveness, transport services and logistics, trade facilitation, standards and certification, and part of the internal and external trade policy environment.
1.3 Impact of Changes in Key Determinants of Trade and Logistics Facilitation

1.3.1. Changes in Transport Infrastructures and Services

Improvements in transport infrastructure and services are measured in the reduction in service time and/or cost and the increase in reliability for both. These changes are continuous rather than discrete. A reduction in service time lowers the carrying costs for goods in transit and in inventory levels at the point of delivery. An increase in reliability also reduces carrying costs for transit time by allowing a reduction in the slack time needed to ensure inter-modal and intra-modal connections and a reduction in inventory levels at the point of destination. The total gain in productivity is the sum of the time-related savings and the reduction in cost for the service.

The reduction in transit time and operating costs can be achieved through improvements in infrastructure that increase the capacity, quality and coverage of the network. Similar reductions can be obtained by increasing competition among service providers and their ability to improve utilization of their equipment. Improvements in logistics services can also increase coverage of the frequency and quality of service on different routes. This, in turn, increases the combinations of transit times, costs and levels of reliability on offer to the shippers, who can then choose the one offering the greatest value. Table 1.2 shows some of the initiatives that can improve the quality of the logistics services.

---

3 Storage and Clearing and forwarding are not covered in transport but in other logistics services.
1.3.2. Changes in Trade Regulatory Procedures

Changes in trade regulatory procedures can facilitate trade through simplification of regulations and procedures as well as better management of staff and inspection equipment. Other improvements include investments in infrastructure to increase the numbers of facilities where these procedures are performed and extension of the hours of operation at these facilities. Additional opportunities for improving the regulatory framework include pre-arrival processing of documents and new modes of interaction between regulators and trusted shippers. The productivity gains from these improvements include (i) reduction in time for preparation of documentation and processing of cargo; (ii) reduction in formal and informal costs associated with the regulatory activities, and (iii) increase in predictability of both cost and processing time. The relationship between the types of improvements and the productivity gains is shown in Table 1.3.

### Table 1.2: Impact of Improvements in Transport Infrastructure and Logistics Services

<table>
<thead>
<tr>
<th>Initiatives</th>
<th>Reduction in</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time</td>
<td>Cost</td>
<td>Uncertainty</td>
</tr>
<tr>
<td>Increase competition in transport services</td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Introduce performance standards for specific logistics services</td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Establish centers for collection/consolidation/distribution</td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Increase variety of service quality in terms of C/T/R</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Use ITC for contracting services, coordinating movements, tracking cargo</td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Simplify transport regulation</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Simplify transit agreements</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Reduce taxation on logistics services</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Improve quality transport infrastructure</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Increase capacity of transport network</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Increase coverage of transport network</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

*Note:* ●Primary improvement, ○Secondary improvement

*Source:* Authors.

### Table 1.3: Impact of Improvements in Regulatory Procedures

<table>
<thead>
<tr>
<th>Initiatives</th>
<th>Reduction in</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time</td>
<td>Cost</td>
<td>Uncertainty</td>
</tr>
<tr>
<td>Increase formal risk management in cargo clearance</td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Introduce alternative forms of collaboration with shippers (AEO)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Promote private sector testing and certification</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Harmonize documents and single window submission</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Introduce joint inspections</td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Increase opportunities for duty-free storage and processing of re-exports</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Increase use of ITC for document submission and cargo tracking</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Simplify tariffs</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Simplify trade restrictions</td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Use ITC for dissemination of regulations (searching and downloading)</td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Improve infrastructure for cargo clearance</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Establish behind the border facilities for inspection and clearance</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

*Note:* ●Primary improvement, ○Secondary improvement

*Source:* Authors.
1.3.3. Supply Chains Restructuring

The structure of supply chains can be changed to accomplish different objectives. Perhaps the most common objectives are to reduce costs and delivery times and to accommodate larger volumes of traded goods. A variety of strategies are used to achieve these objectives including aggregation of goods to capture economies of scale, reduction in number of participants through integration of services and simplification of transactions, as well as greater coordination among the participants with a shift towards fixed schedules.

Over the last several decades, greater attention has been given to restructuring supply chains to reduce the cost and increase the value of the goods moving through these chains. The primary strategy has been to improve performance as measured in terms of order cycle and order fulfillment. Faster and more reliable deliveries of inputs and finished products not only reduce the requirements for inventory but also allows for greater flexibility in planning production and sales. For manufacturing and assembly, it permits a better approximation to just-in-time production and allows shorter production runs. For retailers, it reduces the likelihood of shortages and overstock and permits coordination of sales at multiple outlets and more frequent changes in the products being sold. Other strategies for increasing the value of goods moving through the supply chain include: (i) relocate processing activities and logistics services to increase the portion of the value added captured within a country; (ii) diversify sources of inputs to improve reliability of supply and to allow for greater differentiation; (iii) diversify distribution channels to increase the markets served, market share, and value realized in each markets; (iv) specialize supply chains to differentiate inputs and products based on quality; and (v) introduce value added logistics services such as customization and after-sales service.

The impacts of changes to the supply chain structure that are intended to add value are summarized in Table 1.4. These improvements are usually discrete. This means that there must be a minimum level of change in order to cause an improvement in performance. Not included in Table 1.4 is an increase in the availability of trade finance, which would create opportunities for backwards and forwards integration, intermediate processing, and higher value inputs.

Supply chains can also be restructured to mitigate financial risk or redistribute that risk among the participants. Examples of the former include adjustments to changes in market conditions through (i) postponement of final configuration of products, (ii) flexibility in choice of final destination, and (iii) consolidation at distribution centers that serve multiple markets.

Examples of the latter include changes in (i) contractual arrangements between suppliers of inputs, producers of outputs and the buyers of these products, (ii) terms of trade and method of payment between these parties, (iii) timing and location for transfer of ownership of goods moving through the supply chain, and (iv) the role of intermediaries in facilitating payments to and reducing the commercial risk of other participants.

1.4 Towards an Integrated Supply Chain, Logistics and Trade Facilitation Agenda

Globalization of the flow of materials has led to changes in the organization of trade logistics. By the mid-1980s, these changes were well underway with the emphasis on minimizing inventories initially at storage facilities for inputs to production and maintenance and then at storage facilities for the goods to be sold and finally throughout the entire supply chain. This required a reduction in delivery times and tighter scheduling of downstream activities. As a result, it was necessary to integrate the planning of transport and storage to achieve a unified objective. By the early 1990s, the transformation of production from a single activity at a single location to a sequence of activities conducted at different locations along a supply chain was well established in international trade. The redesign of material processing and the related supply chains has been accompanied by a marked tendency to contract out this service to specialized logistics operators.
<table>
<thead>
<tr>
<th>Results from Change in Structure</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trade Volume</td>
</tr>
<tr>
<td><strong>Inbound</strong></td>
<td></td>
</tr>
<tr>
<td>Reduce delivery time</td>
<td></td>
</tr>
<tr>
<td>Improve reliability of delivery</td>
<td></td>
</tr>
<tr>
<td>Differentiate inputs by source</td>
<td>○</td>
</tr>
<tr>
<td>Differentiate inputs by quality</td>
<td>○</td>
</tr>
<tr>
<td>Accommodate a more complex input mix</td>
<td></td>
</tr>
<tr>
<td>Introduce Value Added Logistics services (VALs)</td>
<td>○</td>
</tr>
<tr>
<td>Reposition VALs</td>
<td></td>
</tr>
<tr>
<td><strong>Outbound</strong></td>
<td>○</td>
</tr>
<tr>
<td>Reduce delivery time</td>
<td>○</td>
</tr>
<tr>
<td>Increase reliability of delivery</td>
<td>○</td>
</tr>
<tr>
<td>Differentiate products by quality and order size</td>
<td>○</td>
</tr>
<tr>
<td>Diversify product mix</td>
<td>○</td>
</tr>
<tr>
<td>Diversify distribution channels and markets</td>
<td>○</td>
</tr>
<tr>
<td>Customize products</td>
<td>○</td>
</tr>
</tbody>
</table>

*Note: ○Primary improvement, ●Secondary improvement

*Source: Authors.*

At the end of the 1990s, efforts to improve the international flow of goods focused on trade facilitation, specifically simplification, standardization and harmonization of procedures for the movement of goods across borders, including documentation and financial transactions. Initially, the focus was on customs procedures and benefited from the 1999 revisions to the International Convention on the Simplification and Harmonization of Customs Procedures (the Kyoto Convention) and the development of analytical tools including the Time Release Study and the original version of the Trade and Transport Facilitation Assessment (2001). However, early successes in improving customs procedures revealed wider problems involving all border management agencies. This required a coordinated effort by all trade regulatory agencies, especially among their representatives at the border and other control points.

In recent years, efforts to facilitate trade have been expanded to include all elements of the supply chains used by importers and exporters. This perspective encompasses components such as transport infrastructure, value added logistics services, trade finance and risk mitigation, as well as streamlining of regulatory procedures and the removal of administrative barriers (Arvis, 2007). As a result, there is a convergence between the agendas of trade logistics and trade facilitation, in both analytical work and practice.

### 1.5 Policy Levers to Enhance Performance

Figure 1.3 provides a matrix showing multifaceted interaction between key pillars of trade logistics and facilitation and policy levers adopted to enhance trade competitiveness. Further detail will be discussed in Chapter 8. Policies related to transport infrastructure and logistics services must take into account the synergies between development clusters, main corridors, and international gateways. Policies focused on supply chain organization support the improvement of supply chain performance of major production and...
export activities. As the goods move through the supply chain, the government’s priority should be selective sectors to strengthen their backward and forward linkages in order to capture value added. Policies addressing border management issues create a regulatory environment for the carriage of goods and cross-border movement of goods.

1.6 Methodology, Organization of Research Activities, and Outputs

The Trust Fund on Vietnam Transport and Trade Facilitation Assessment and Strategic Planning (TF 097373) was conceptualized in May 2010 to support activities that help fill the policy gap in trade facilitation and support the formulation of a national action plan for trade facilitation and competitiveness. The national action plan, when implemented, will enhance Vietnam’s competitiveness and sustain productivity-based growth. The trust fund supports the following three main activities: (i) a Transport and Trade Facilitation Assessment (TTFA), (ii) an institutional study, and (iii) a corridor analysis.

TTFA is an in-depth assessment, using World Bank-developed methodology, to assess Vietnam’s trade facilitation performance. The institutional study determines the readiness of the implementing agencies and explores challenges that may arise during the implementation phase. It recommended an adequate policy and institutional framework that can enable effective implementation of trade facilitation. The corridor analysis attempted to model current and future domestic and international freight flow volume, time, and logistic costs for Vietnam’s major supply chains and assess main corridors’ capacity and identify possible improvements and interventions to enhance competitiveness of Vietnamese trade activities.

Figure 1.3: Key Policy Levers to Enhance Performance

Source: Authors.

---

An outcome of the Phase 1 TTFA is a desk research report on constraints to Vietnam’s economic growth, trade, and investment from a trade facilitation perspective. This was prepared and presented as part of the activities designed under the World Bank’s technical assistance to support the development of Vietnam Socio-Economic Development Strategy 2011–2020. As a result, the infrastructure related to trade, transport and logistics, and border management has become one of the key strategic issues addressed in a synthesis report presenting the program’s findings to be submitted to the Vietnamese senior authorities. The outcome of Phase 1 also provided insightful inputs for preparation of Phase II.

The Phase II TTFA identified how to improve the competitiveness of the Vietnam’s exports. Phase II TTFA was undertaken based on a comprehensive TTFA survey conducted by a research team from the University of Economics, Ho Chi Minh City. Its outputs have been produced with the assistance of Institutional Analysis conducted in collaboration with the National Committee for International Economic Cooperation (NCIEC) and Corridor Analysis, studied in collaboration with Transport Development and Strategy Institute (TDSI) of Ministry of Transport. Phase II has identified various policy changes, public investments, modifications of industrial organization, and improvements in the quality and diversity of logistics services. The process and results from the TTFA and related studies that are connected to various World Bank projects and programs are indicated in Figure 1.4.

**Figure 1.4: Trade Facilitation Assessment: Research Activities and Output**

![Diagram showing research activities and output](image)


**Source:** TTFA Mission Reports, World Bank.
The types and substance of initiatives resulting from this overall study are shown in Table 1.5.

### Table 1.5: Possible Follow-On Initiatives

<table>
<thead>
<tr>
<th>Technical Assistance for</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Restructuring contracts and changing buyer relationships</td>
</tr>
<tr>
<td>• Regularizing supply of raw materials for intermediate goods</td>
</tr>
<tr>
<td>• Using logistics services for value addition</td>
</tr>
<tr>
<td>• Improving distribution of market information</td>
</tr>
<tr>
<td>• Performance supply chain management audits</td>
</tr>
<tr>
<td>• Contract farming and other mechanisms to regularize supplies of raw materials</td>
</tr>
<tr>
<td>• IT support for marketing and supply chain management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trade Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Financing instruments either direct or indirect through factoring</td>
</tr>
<tr>
<td>• Guarantees for loans related to capital investment in trade-related activities</td>
</tr>
<tr>
<td>• Lending for investment in technology that enhances value as well as productivity</td>
</tr>
<tr>
<td>• Investments in backward linkages for textiles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trade Facilitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reducing physical inspections</td>
</tr>
<tr>
<td>• Simplification of tariffs</td>
</tr>
<tr>
<td>• Development of industrial clusters and corridor development</td>
</tr>
<tr>
<td>• Trade facilitation policy coordination and implementation of National Single Window</td>
</tr>
<tr>
<td>• Infrastructure Development</td>
</tr>
<tr>
<td>• Investment in specific infrastructure, e.g. port terminals, access to ports, and airport cargo terminals</td>
</tr>
<tr>
<td>• Prioritization of planned road and rail projects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Public Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Export competitiveness focusing explicitly on one or two strategies, e.g. value addition, moving up the value chain, product diversification.</td>
</tr>
<tr>
<td>• Continuation of customs reform with explicit performance targets</td>
</tr>
<tr>
<td>• Development of specific supporting industries</td>
</tr>
<tr>
<td>• Macroeconomic and structural policy implication of the export led growth</td>
</tr>
</tbody>
</table>

Source: Authors.
CHAPTER 2
TRADE STRUCTURE AND DYNAMICS

2.1 Introduction

Vietnam’s spectacular growth since Doi-Moi -- the 1986 reforms intended to create a market-socialist economy -- has been the result of changes from economic liberalization, in which trade has played a vital role. Vietnam has become one of the most trade-oriented countries in the world. The rapid growth of exports in Vietnam was underpinned by the removal of trade barriers, both tariff and non-tariff, during the reform process. While this positive development is to be lauded, evidence is emerging that its continuation cannot be guaranteed. Existing drivers of export growth are mostly spent and new proactive efforts to boost export competitiveness must now be established. With Vietnam becoming increasingly trade-dependent, trade facilitation has become a vital determinant of Vietnam’s export competitiveness.

This chapter provides an overview of Vietnam’s trade structure and growth benchmarked against its neighbors. While highlighting its strengths, it also sets out the many challenges the sector faces. These provide the context for the discussion of trade facilitation, the strengthening of which has the potential to better leverage Vietnam’s positive trade attributes while mitigating its challenges.

2.2 Trade Evolution

2.2.1 Robust Export Growth and Increasing Trade Openness

Vietnam’s trade performance since the beginning of Doi-Moi has been impressive, witnessing major growth in export and market share. The country’s international trade has grown steadily over the past two decades. Figure 2.1 shows that this growth has been particularly rapid after 2003, although it was interrupted briefly by the global financial crisis. On average, exports expanded at an annual rate of 17.43 percent from 2000 to 2010, but imports expanded even faster, at an average 18.42 percent. Trade performance has been strengthened over the past 15 years, along the lines of increasing trade liberalization. Vietnam’s exports
started expanding when it participated in the ASEAN Free Trade Area (AFTA) on June 1, 1996, after the
country’s admission as a member of the Association of South East Asia Nations (ASEAN) in July 1995. Other
key milestones with a positive effect on Vietnam’s trade performance include the Bilateral Trade Agreement
between Vietnam and the United States (US BTA) on December 10, 2001, and Vietnam’s accession to WTO
membership on December 11, 2006. The global financial crisis of 2008, which reached Vietnam in 2009, has
had an adverse impact on the country’s trade performance.

**Figure 2.1: Growth of Vietnam’s Trade, 1996-2011**

This growth is translated into growing trade openness. Figure 2.2 shows that exports as a percentage of
GDP have grown very rapidly when the periods 1996-1998 and 2010-2011 are compared.

**Figure 2.2: Booming Exports**

Vietnam’s export growth has been the most rapid in the Southeast Asian region, and in terms of trade
openness, it is comparable with its trade-oriented neighbors (Figure 2.3A). The total export value over the
country’s GDP -- one indicator of the openness of an economy -- has increased, reaching 68 percent in 2010,
A fuller appreciation of this growth can be obtained from examining the sources of this growth. Table 2.1 shows Vietnam’s strong export growth from 2006 to 2011 is not simply a function of the sectors and market in which Vietnam’s exporters practice (or “pull” factor), but rather is mainly the result of true performance (or “push” factor). This compares favorably with selected regional peer countries—in fact, Vietnam’s performance on both volume and price matches that of China.

**Figure 2.3: Export Growth, Trade Openness, Trade Per Capita – Vietnam vs. Its Neighbors**

A: Export Growth Per Annum (2000-2010)  

Source: World Development Indicators, World Bank.

A fuller appreciation of this growth can be obtained from examining the sources of this growth. Table 2.1 shows Vietnam’s strong export growth from 2006 to 2011 is not simply a function of the sectors and market in which Vietnam’s exporters practice (or “pull” factor), but rather is mainly the result of true performance (or “push” factor). This compares favorably with selected regional peer countries—in fact, Vietnam’s performance on both volume and price matches that of China.

---

5 “Pull” factors refer to factors over which a country has no direct, short-term control – specifically this refers to the composition of the current export basket, in terms of the sectors in which the country is specialized and the markets to which it exports. The decomposition presented in tables 2.1 and 2.2 aims to strip away these compositional effects to expose true performance.

6 “Push” factors refer to performance stripped of the compositional effects of markets and sectors.
Figure 2.4 reviews key decompositions of export growth from an inter-temporal perspective. It shows that Vietnam's export growth has been driven mainly by the push effect as opposed to the geographical and sectoral effect. The figure also shows Vietnam's export growth to be above world export growth except for the period of the global financial crisis.

Table 2.1: Vietnam Export Performance 2006-2011

<table>
<thead>
<tr>
<th></th>
<th>Export Growth</th>
<th>Export Market Share Change</th>
<th>Performance (Export Growth Without Composition Effects)</th>
<th>Pull Factors (Specialization, Composition Effects), of which:</th>
<th>Push Factors (&quot;Performance&quot;, i.e., Export Market Share Growth Without Composition Effects), of which:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Geographical</td>
<td>Sectoral</td>
<td>Overall (Value)</td>
</tr>
<tr>
<td>Vietnam</td>
<td>20.1</td>
<td>10.2</td>
<td>20.8</td>
<td>-0.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Cambodia</td>
<td>15.5</td>
<td>5.6</td>
<td>19.8</td>
<td>-3.6</td>
<td>-0.6</td>
</tr>
<tr>
<td>Philippines</td>
<td>4.0</td>
<td>-5.9</td>
<td>3.3</td>
<td>1.0</td>
<td>-0.3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>13.5</td>
<td>3.6</td>
<td>10.9</td>
<td>0.2</td>
<td>2.4</td>
</tr>
<tr>
<td>China</td>
<td>16.8</td>
<td>6.9</td>
<td>20.4</td>
<td>-0.2</td>
<td>-3.4</td>
</tr>
<tr>
<td>Thailand</td>
<td>13.9</td>
<td>3.9</td>
<td>14.8</td>
<td>1.2</td>
<td>-2.1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>9.1</td>
<td>-0.9</td>
<td>9.0</td>
<td>0.8</td>
<td>-0.8</td>
</tr>
</tbody>
</table>


Table 2.1: Vietnam Export Performance 2006-2011

Figure 2.4 reviews key decompositions of export growth from an inter-temporal perspective. It shows that Vietnam's export growth has been driven mainly by the push effect as opposed to the geographical and sectoral effect. The figure also shows Vietnam's export growth to be above world export growth except for the period of the global financial crisis.

Source: Calculation based on data from UN Comtrade via WITS.
These positives aside, Vietnam's per capita trade remains modest when compared to some of its neighbors (Figure 2.5). This includes not only smaller countries like Malaysia and Singapore but also larger countries such as China and Thailand. It suggests that significant scope remains for major export growth over the coming decades.

![Figure 2.5: Per Capita Trade, ASEAN and China, 2000-2010](source)

**2.2.2 Growing Trade Deficit**

Despite impressive export performance in recent years, Vietnam faces increasingly serious deficits in its trade. Until 2000, Vietnam's trade had been relatively balanced, but since then, the balance of trade has been increasingly negative. The source of this imbalance varies between countries. Vietnam runs trade surpluses with the United States and the EU, has a relatively balanced trade with Japan but has significant deficits with China and the ASEAN countries. The deficit with China has been growing as shown in Figure 2.6 and in 2010 was equal to the overall deficit. The main imports from China include (i) machinery, instruments and accessories; (ii) textile fabrics; (iii) computers, electrical products and parts; (iv) iron and steel; and (v) petroleum and refined oil. These items accounted for 22.4 percent, 11.1 percent, 8.4 percent, 7.6 percent, and 5.3 percent of total imports from China, respectively.

The trade deficit with China reflects the different ways the two countries tap into global supply chains. China procures natural resources and raw materials for domestic manufacturing and assembly from ASEAN, African and Latin American countries and exports final products to the United States, EU, Japan, and the rest of the world. Apart from ASEAN countries, Vietnam imports machinery and accessories from China and exports a mix of final and un-finished products to the United States, EU, and Japan. From the supply chain perspective, Vietnam's trade deficit with China reflects its reliance on work-in progress from China and its low value added and low sophistication.

---

7 Deficits are not caused by value chains. Parts imported are all exported.
Trade diversification is important because concentration increases a country’s vulnerability to changes in import sources and markets. Diversification can occur across products or geographically. Vietnam’s exports are concentrated in a relatively small number of products and a few countries/country groups. Diversification of trade is important because it gives a country a degree of protection from the risk of the loss of markets or competitiveness of goods exported. In product terms, Vietnam’s exports are quite concentrated. The top ten exported products -- textiles and garments, footwear, fisheries products, crude oil, electronics and parts, wooden products, rice, rubber, coffee, and coal -- account for two thirds of the total export value (Figure 2.7). Apparel and footwear, all labor-intensive industries, make up most of Vietnam’s manufacturing exports. The imports are less concentrated. The top five import items, including iron and steel, petroleum, textile fabrics, electronics, and plastic constitute about 50 percent of the total imports.
A second dimension of diversification is the number of trading partners. Vietnam's main export destinations are the United States, the countries in the European Union, Japan, and Australia (Figure 2.8). The total exports to these countries account for 60 percent of Vietnam's total export in 2010. Vietnam's imports are equally concentrated -- they originate mostly from the Asian region. More than 60 percent of its imports come from China, Singapore, Taiwan (China), Japan and Korea.

Figure 2.8: Vietnam's Major Exports and Imports, by Country of Origin/Destination, 2010

Source: GSO.

The product and market concentration of Vietnam's exports however has reduced in recent years. As Figure 2.9 shows, there has been significant improvement in diversification of products and markets. With respect to the latter, Vietnam now compares favorably with all its neighbors.

Figure 2.9: HHI Concentration Indices

Source: Calculation based on data from UN Comtrade.
2.3 Export Competitiveness and Technology

Despite achieving major growth in exports, a growing market share, and increasing diversification, Vietnam faces a growing trade deficit. This reflects a number of weaknesses in several areas of competitiveness. These areas, elaborated below, are: (i) low value added, low sophistication, low quality; and (ii) limited growth contribution from new products.

2.3.1 Trade Structure: Still Dominated by Less Sophisticated Products

The structure of trade can be viewed from the perspective of product groups or from the level of technology embodied in the products exported. While the former categorization is the norm, the latter provides a better picture of the potential for Vietnam's exports to move to higher value-products through technology enhancement. The structural change of Vietnam's manufactured exports, classified by the level of technology embodied, is presented in Figure 2.10. For Vietnam, the export of primary goods, including crude oil, accounts for a large share of its total export. This share has declined over the past decade from 51.7 percent in 2000 to 30.14 percent in 2010. Resource-based exports account for less than 10 percent of total exports and this share has remained almost unchanged over the period. Low and medium tech export and resource-based exports account for the majority, with non-oil exports having increased from 42.9 percent in 2000 to 59.81 percent in 2010. This means, in effect, that Vietnam's exports have not moved significantly into higher value products over the last decade.

![Figure 2.10: Composition of Vietnam’s Exports, by Technology Level Embodied, 2000-2010](source: UN Comtrade)

This structure of exports contrasts sharply to that of China or India. China's low-tech and resource-based exports decreased from 54.5 percent in 2000 to 39.5 percent in 2010 and India’s from 81.3 percent to 71.8 percent (Table 2.2). China’s rising share of high-tech exports, in particular, reflects its government’s objective of moving away from labor-intensive exports, but is also the result of its strong presence as the final point of assembly for global supply chains. India’s increase in its high-tech export share is the result of its growing technological capability and booming IT sector. This leaves huge potential for Vietnam’s export performance improvement.
A rising share of high-tech exports does not necessarily imply upgrading of technological capability. Figure 2.11 shows Vietnam’s export composition relative to its regional peers. The shares of high-tech exports are highest in the Philippines and Malaysia, and both are higher than China. In these cases, however, this high share reflects these countries’ participation in global supply chains -- China’s technological capability is higher than these countries.

**Table 2.2: Comparing Export Composition: Vietnam vs. China and India, 2000-2010**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource-based</td>
<td>13.87</td>
<td>12.58</td>
<td>9.15</td>
<td>8.26</td>
<td>34.42</td>
<td>45.42</td>
</tr>
<tr>
<td>Low tech</td>
<td>64.67</td>
<td>59.43</td>
<td>45.36</td>
<td>31.22</td>
<td>46.90</td>
<td>26.33</td>
</tr>
<tr>
<td>Medium tech</td>
<td>10.32</td>
<td>13.79</td>
<td>24.29</td>
<td>28.33</td>
<td>13.34</td>
<td>20.34</td>
</tr>
<tr>
<td>High tech</td>
<td>11.14</td>
<td>14.19</td>
<td>21.20</td>
<td>32.19</td>
<td>5.34</td>
<td>7.90</td>
</tr>
</tbody>
</table>

Source: UN Comtrade, 2010.

Categorizing trade on the basis of product groups, however, shows important changes (Figure 2.12). In the early days of reform, Vietnam exported oil, various manufacturing and agriculture processing products, and imported not only consumption goods, but also raw materials for domestic production as well as some capital goods to modernize production processes and increase industrial efficiency. Gradually, the
composition of Vietnam's exports has shifted to reflect the success of the industrialization process. The export share of manufactured products, particularly labor-intensive products like textiles, garments and footwear, has been increasing and gradually displacing the traditional agricultural products in trade.

**Figure 2.12: Composition of Vietnam’s Exports, by Product Groups 2000-2010**

![Graph showing the composition of Vietnam's exports from 2000 to 2010.](image)

*Source: UN Comtrade, 2010.*

Although the above classifications are product-based, exports can also be grouped by product type (Table 2.3). Primary exports include oil and other primary non-oil exports. Manufacturing exports are classified into four groups of resource-based, low-tech, medium-tech, and high-tech exports. Agricultural products, e.g., rice, coffee, seafood, are categorized as resource-based exports. Manufactured products, e.g., textiles and garments, footwear, and electronics fall into low-tech part of the medium-tech group.
Table 2.3: Classification of Exports by Product Type and Technology

<table>
<thead>
<tr>
<th>Total</th>
<th>Groups</th>
<th>Sub-group (detail)</th>
<th>Example</th>
<th>Sub-group</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL EXPORTS</td>
<td>Primary</td>
<td>Primary (Oil)</td>
<td>Crude oil</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary (Non-oil)</td>
<td>Rice, coffee, seafood, coal, stone/sand/gravel, aluminum, copper</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resource based 1: Agro based</td>
<td>Seaffood, tobacco</td>
<td>Resource Based</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resource based 2: Other resource based</td>
<td>Heavy petrol/bitum oils, starches/glues/etc., glass</td>
<td>Low Tech</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low technology 1: Fashion cluster</td>
<td>Footwear, apparel</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low technology 2: Other low tech</td>
<td>Furniture, jewelry</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medium Technology 1: Automotive</td>
<td>Motorcycles, motorbike parts</td>
<td>Medium Tech</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medium Technology 2: Processing</td>
<td>Man-made woven fabrics, Manufactured fertilizers, Primary/prods iron/steel</td>
<td>High Tech</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medium Technology 3: Engineering</td>
<td>Electrical distribution equip, Electric circuit equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High tech 1: Electrical and electronics</td>
<td>Office machines, telecommunication equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High tech 2: Other high tech</td>
<td>Rotating electric plant, Photographic equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>Other transactions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: UN Comtrade.

2.3.2 Technological Intensity: Higher Share of Manufactured Exports, but Limited Increase in Technological Intensity

As the successful emergence of Japan, Korea, Taiwan (China), Singapore, and now China clearly shows, export value added can be enhanced through heightened technological intensity in exported products and services. These examples also show that the export model on low labor cost and labor intensive, low technology exports will ultimately diminish as wage rates inevitably rise. What has occurred in these countries and the way they have responded is a cautionary tale for Vietnam, which depends heavily on labor-intensive manufactured exports.
One way to consider the technological intensity of exports is to examine simultaneously the share of manufactures in total exports and the level of technology embodied in these manufactured exports. In Figure 2.13, the horizontal axis shows the share of manufactured export in total export while the vertical axis indicates the share of medium-tech and high-tech exports in total manufactured exports. China achieved both an increase in its share of manufactured goods in total export and technological intensity between 2000 and 2010. Korea and India experienced an increase in technological intensity but not the share of manufactured goods in total exports. The reverse was true for Vietnam, which had an increase in the share of exports that were manufactures but very modest growth in the technological intensity of its manufactured exports. This is also true for the other Southeast Asian countries shown -- Cambodia, Indonesia, Malaysia and Thailand.

**Figure 2.13: Share of Manufactured Exports in Total Export and Technological Intensity of Manufactured Exports, 2000-2010**

![Graph showing the share of manufactured exports in total export and technological intensity of manufactured exports for various countries from 2000 to 2010.](Image)

Source: UN Comtrade, 2010.

Table 2.4 shows, in greater detail, changes in the technological composition of manufactured exports in selected Asian countries between 2000 and 2010. The shift to high-technology is particularly pronounced for China, especially in the area of high-tech exports. India, likewise, has seen rapid rise of high-tech exports, but its share of high-tech exports in total manufactured exports is only a third of China’s. Korea, which has become a technology powerhouse, saw major growth of medium-tech exports rather than high-tech exports. Vietnam’s export shares of manufactured exports of various technological intensities start from a very low base compared to its neighbors and make at best modest gains. The experience of Vietnam’s Southeast Asian neighbors is no better. The high-tech export share actually fell for Indonesia, Malaysia, the Philippines and Thailand.

---

2.3.3 Technological Intensity and Export Performance in World Markets: Overall Export Growth, but Powered by Low-tech Exports

To assess the export performance of Vietnam’s exports of varying technological intensities, it is instructive to look at the changes in their export value and market share in comparison with other countries, mostly Asian. Countries are normalized by population size so that the data are not dominated by large countries like India and China. The results are presented in Figures 2.14 to 2.17.

Table 2.4: Technological Structure of Manufactured Exports: Vietnam vs. Competitors, 2000-2010

<table>
<thead>
<tr>
<th>Countries</th>
<th>2000 (%)</th>
<th>2010 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HT</td>
<td>MT</td>
</tr>
<tr>
<td>Cambodia</td>
<td>0.14</td>
<td>1.17</td>
</tr>
<tr>
<td>China</td>
<td>21.20</td>
<td>24.29</td>
</tr>
<tr>
<td>India</td>
<td>5.34</td>
<td>13.34</td>
</tr>
<tr>
<td>Indonesia</td>
<td>14.87</td>
<td>19.53</td>
</tr>
<tr>
<td>Japan</td>
<td>27.55</td>
<td>57.84</td>
</tr>
<tr>
<td>Korea</td>
<td>35.11</td>
<td>35.29</td>
</tr>
<tr>
<td>Malaysia</td>
<td>55.11</td>
<td>21.34</td>
</tr>
<tr>
<td>Philippines</td>
<td>69.00</td>
<td>12.45</td>
</tr>
<tr>
<td>Thailand</td>
<td>32.43</td>
<td>27.16</td>
</tr>
<tr>
<td>Vietnam</td>
<td>11.14</td>
<td>10.32</td>
</tr>
</tbody>
</table>

Source: UN Comtrade.

Figure 2.14: Growth and Market Share Change of High-tech Exports, Selected Countries, 2000-2010

Note: Area of bubbles indicates high-tech exports per capita in 2010. Source: UN Comtrade.

Figure 2.14 shows the impact of high-tech exports from Vietnam and other comparators in the world market. The size of the bubble is proportional to the value of high tech exports per capita. Vietnam has a higher than average growth rate for these products but it did not gain much in terms of market share and has a low value of per capita high-tech exports. Other countries such as Korea, Malaysia and Thailand, although not gaining much in terms of market share, have significantly higher levels of high-tech exports per capita. However, these figures have not been adjusted for import content, which are high in countries like China, Malaysia and the Philippines because of their participation in global supply chains. Japan seems to be losing...
ground in high-tech exports, with a decline of five percent market share over the last decade. China stands out as an outlier in high-tech exports, with the highest growth rate of exports and gain (almost 17.25 percent point) in market share. However, the high-tech exports per capita for China is still moderate compared with Japan, Korea and Malaysia.

**Figure 2.15: Growth and Market Share Change of Medium-tech Exports, Selected Countries, 2000-2010**

Note: Area of bubbles indicates medium-tech exports per capita in 2010. 
Source: UN Comtrade.

Figure 2.15 above shows the impact of Vietnam's medium technology exports in comparison with other countries. Again, China stands out in this sector against the backdrop of Japan losing ground. In this sector, Vietnam's exports achieved a high growth rate but its market share appeared unchanged. Normalized for population, Korea and Japan are the major players in world markets in population per capita terms. China and India, with their large populations, are much less significant.

**Figure 2.16: Growth and Market Share Change of Low-Tech Exports, Selected Countries, 2000-2010**

Note: The area of each bubble indicates the value of low-tech exports per capita in 2010. 
Source: UN Comtrade.
In the low-tech sector, Vietnam is performing relatively well, with a very high growth rate (higher than most other countries) of exports, as well as some gain in market share. Vietnam also has low-tech exports per capita as high as China (Figure 2.16). However, China, although experiencing somewhat slower growth of low-tech exports, far outpaces Vietnam in terms of growth of market share.

**Figure 2.17: Growth and Market Share Change of Resource-based Exports, Selected Countries, 2000-2010**

![Graph showing annual growth rate of exports and change in world market share for Vietnam, China, Japan, Thailand, Malaysia, Philippines, Cambodia.](image)

*Note:* The size of each bubble indicates resource-based exports per capita in 2010.
*Source:* UN Comtrade.

In terms of resource-based exports (Figure 2.17), Vietnam has also experienced a high growth rate as well as a gain in market share. However, in terms of export per capita, the level is still relatively low when compared to far more industrialized Malaysia and Thailand.

### 2.4 How Competitive Are Vietnam’s Selected Major Exports?

**Major Low Tech and Resource-Based Exports Competitive but Below Average Annual Growth Rate of Global Trade**

The growth of Vietnam’s exports shows that they are competitive overall. As Figure 2.18 shows, from 2006 to 2010, total national export value increased by 1.8 times (from US$39.8 billion to US$72.7 billion), in which the value of six major commodities, singled out for study here -- electronics, footwear, textiles and apparel, rice, coffee and seafood -- accounted for 41-43 percent of the total exported value.

**Figure 2.18: Export of Six Selected Commodities**

![Graph showing export value of six selected commodities from 2006 to 2010.](image)

*Source:* GSO.
As Figure 2.19 and the more detailed analysis in Volume 2 show, the six major export products have either increased their market share or combined export growth with market share increase over the past decade.

**Figure 2.19: Export Positions of Six Selected Leading Export Products, 2000-2010**

![Change in World Market Share for Vietnam, 2000-2010](image)

*Note:* Area of bubbles indicates Vietnam's exports in 2010.
*Source:* UN Comtrade.

**World Market Share Gains, but from Low Tech and Low Quality Exports**

Taken together, these figures show Vietnam to have comparative advantage in low-tech manufactures and resources. But low technology is not the only reason for the low value-added of Vietnam's exports. Another is the low quality positioning of its major exports. As Figure 2.20 shows, Vietnam's textile and footwear exports, while showing some gains in market share, are of below average quality.

**Figure 2.20: Low Quality Positioning**

![Log diff in relative quality vs log diff market shares](image)

*Source:* Calculation based on data of UN Comtrade.
2.5 Product and Market Expansion

What Products should be promoted for Export and to what Markets?  

Export competitiveness can be gauged by the demand for a country's product in a particular market, i.e. its exports to a particular market. Export dynamism, however, can be measured by the growth in the value of exports over a period of time. In combination, these dimensions permit identification of the most important products in a market. Vietnam's export performance can then be benchmarked with reference to these identified important products. Table 2.5 identifies the 20 most dynamic products in the world market, together with Vietnam's exports growth rate and its proportion in the world market of these products. Out of these twenty products, four are classified as high-tech products; four are medium-tech products, while one is in low-tech manufactures. The remaining products are all resource-based products. Although Vietnam's export of each product is relatively insignificant as a share of total exports worldwide, the growth rate of exports of 13 of these products exceeds, sometimes by far, the global export growth rates.

This exercise has been repeated for each of the four big markets for Vietnam's exports, namely the United States, Japan, the EU and China, with a view to assessing Vietnam's export performance for its products. The findings are summarized below:

| Table 2.5 World’s most Dynamic Manufactures Imports and Vietnam’s Contribution, 2009 |
|---------------------------------|------------------|-----------------|------------------|------------------|------------------|------------------|
| HIGH TECH | RESOURCE - BASED |
| Optical instruments | 0.023 | 20.64 | 116.06 | Iron ore/concentrates | 0.021 | 27.30 | 12.53 |
| Pharmaceutical excluding medicaments | 0.006 | 15.59 | 34.88 | Copper ores/concentrates | 0.102 | 20.46 | 44.33 |
| Medicaments include vet | 0.015 | 15.43 | 26.46 | Ferrous waste/scrap | 0.008 | 19.33 | -3.01 |
| Office machines | 3.553 | 13.77 | 163.42 | Base metal ore | 0.301 | 17.43 | 13.01 |
| MEDIUM TECH | |
| Ships/boats/etc | 0.305 | 15.77 | 69.35 | Base metal waste | 0.058 | 16.34 | 73.52 |
| Plastic waste/scrap | 0.361 | 17.97 | 34.60 | Residual petroleum | 0.003 | 16.15 | 8.37 |
| Manufactured fertilizers | 0.287 | 15.22 | 55.59 | Heavy petrol/bitum oils | 0.202 | 15.10 | 18.88 |
| Pig iron, ferro alloys | 0.241 | 14.41 | 83.41 | Fixed veg oils not soft | 0.097 | 18.98 | 4.53 |
| LOW TECH | |
| Iron/steel railway material | 0.003 | 14.16 | 13.99 | Margarine/shortening | 0.015 | 13.59 | 12.72 |

Note: i from 2001 to 2010.
Source: UN Comtrade, 2010.

10 The most dynamic products are those with the highest traded value growth rate.
The U.S. market: This is a high-tech market; high-tech and medium-tech products in the 20 most dynamic manufactures in U.S. market accounted for 90.35 percent of the United States’ total imports of these 20 products in 2010. Vietnam has not been a major factor in supplying the U.S. market, with export values of 17 dynamic products in this market below US$10 million in 2010. The two goods with the highest market share that Vietnam’s export growth can meet the rising demand in the United States in the market are miscellaneous manufactured articles and sugar/molasses.

EU market: The EU market has 55 percent of high-tech and medium-tech goods in the 20 most dynamic manufactures. Although the growth rate of Vietnam’s exports to the world is generally higher than that of EU’s most dynamic imported products (15 out of 20 EU’s most dynamic products), the country is still a minor player. In addition, Vietnam’s exports to the EU show 16 out of these 20 products were under US$10 million in 2010. Miscellaneous manufactured articles, office machines, and ships/boats are three of Vietnam’s exports with the highest EU market share in 2010, while also achieving stable high growth rates of export to the world during 2000–2010.

China market: Given China’s demand for raw material supplies, China’s 20 most dynamic imports consist of mostly resource-based products (15). Although the share of resource-based manufactures in total imports of these 20 products, their growth rates are high. Metal ores, alloys and waste make up eight out of 20 products. Vietnam performs poorly in exports to China with respect to the latter’s most dynamic imports, with exports of 15 of these products under US$10 million in 2010. Vietnam exported five products with a value of more than US$10 million to China in 2010. Of these only fruit and sound/TV recorders were not metal ores/concentrates-based.

Japan market: Japan’s 20 most important imports are more balanced in both the number of products in each technological group and the import value. Unlike the other major markets, Vietnam seems able to meet Japan’s rising demand in a number of products, including office machines, mechanical transmission equipment, ships/boats, pig iron/ferro alloys, iron/steel bars/rods, iron/steel/aluminum structures, and residual petroleum products. This can be partly explained by the fact that Japan has significant FDI in Vietnam, with companies like Canon, and Panasonic operating large factories to supply the rest of Asia and Japan.

2.6 Conclusion

These statistics are consistent with Vietnam’s growth model, which is based on extensive rather than intensive growth. Figure 2.21 shows the changing contribution of labor, capital and TFP to Vietnam’s economic growth between 1987 and 2010 but was affected by the Asian Financial Crisis. By contrast, the role of capital has been increasing over this period. For this reason the Socio-Economic Development Strategy 2011-2020 calls for a shift to a more productivity-driven model of growth. The same holds for the country’s exports, which, as they grow, should increasingly contribute to the country’s economic advance. The dangers of the present low value-added export structure are clear. While low-tech exports will inevitably face competition from other emerging countries seeking to move up the export value chain, resource exports will ultimately face the prospect of depletion, as has been the case of tin in Malaysia.
The above characterization of Vietnam’s exports shows Vietnam to be in a strong competitive position with its current exports. But this present strength will be hard to sustain in the future. Even as the low quality and low technology of exports limit their value addition, Vietnam’s current comparative advantage of low labor cost will eventually erode. This means Vietnam has no alternative but to increase the value added of exports as the basis for its future economic growth. This challenge has been recognized in the SEDS and stressed in the report Vietnam in the Next Decade and Beyond: Strategic Issues (Vietnam Academy of Social Sciences, 2010). This means upgrading industrial production through enhanced productivity or strengthening technological capacity. The question is how to achieve this upgrading.

In his discussion of the Malaysia case, Ohno (2009) identified two approaches to increasing value added (Figure 2.22). The first is to shift to products with increased value-addition through improved technology. The second is to extend local participation in the supply chain to higher value added segments of the chain. The former takes time and requires a technology upgrading that assumes the existence of the institutional and human resource capability, and, even if properly managed, has the potential for economic dislocation in the interim. It is in any case not the focus of this study. This study focuses attention on the second approach, to which the theme of this study, trade facilitation, should be able to contribute. In the next chapter, the state of Vietnam’s hard and soft infrastructure to support trade facilitation is explored.

**Figure 2.22: The Manufacturing Double Plus Strategy of Malaysia**

The thematic focus of this study notwithstanding, in the long-term, there will be no substitute for the accumulation of technological capabilities, supported by a proactive industrial policy. Many models that facilitate technological upgrading have been successfully applied. These include technology outsourcing, leveraging foreign direct investment (FDI), forward engineering and indigenous innovation. Given Vietnam's existing state of technological development, the most feasible appear to be two approaches successfully employed by China. The first is to integrate into global supply chains to take advantage of technology spillover and learning effects. The second is what is referred to as outsourced innovation. By working with multinational corporations (MNCs) but leaving the technology-intensive part of the production process to them, the potential also exists for some technology acquisition by Vietnamese counterparts.

Neither of these strategies, nor for that matter, any strategy no matter how appropriate, can guarantee success. For that to happen, Vietnam must have the human resource capability to capture this technology transfer. This requires an education and training system that produces a good proportion of graduates trained in the physical sciences, as is the case with Japan, Korea and Taiwan (China) and which is at the heart of China's drive for technology upgrading. Vietnam's education system, which still lags behind many of its regional peers, has a long way to go. Simultaneously with a proactive industrial policy, Vietnam must undertake major strengthening of its education system.
CHAPTER 3

TRADE LOGISTICS PERFORMANCE GAPS

3.1 Introduction

Export competitiveness depends not only on production but also on logistic costs. In the aggregate, the latter is reflected in a number of indices. These indices, of which the World Bank Logistics Performance Index is the only one that provides a total measure, provide quantitative benchmarks for various dimensions of trade logistics in a large number of countries. This comparative context is important, particularly for an increasingly trade-dependent economy like Vietnam. Vietnam’s indicators of trade facilitation, while mixed, leave scope for improvement. These messages are conveyed through the statistical evidence of this section. They also provide the rationale for this study.

3.2 What do the International Indicators Show?

The World Bank’s Logistics Performance Indicator (LPI) places Vietnam in a relatively good position. It is ranked among the top ten lower-middle economies with a better than expected logistics performance given its level of per capita income. However, Vietnam’s overall ranking has not improved. Figure 3.1 shows the LPI breakdown for 2007, 2010, and 2012. The absolute scores for customs and logistics competition have declined over the last five years, while the scores for timeliness and tracking and tracing have shown the greatest improvement. In terms of ranking, customs and logistics competence also showed the greatest decline while timeliness and international shipments had the greatest improvement.
On a comparative basis, Thailand and Vietnam are two countries in the group of ASEAN + China that have faced a drop in ranking between 2010 and 2012, according to LPI as shown in Figure 3.2. While Thailand’s drop of 10 grades has been explained by the adverse impact of floods in late 2011, Vietnam’s drop of 31 grades has been attributed to crises in the two largest logistics firms in Vietnam, Vinashin and Vinaline, faced during the period.

Figure 3.2: Change in LPI Ranking of Logistics Quality and Competence: Vietnam Compared to ASEAN + China, LPI 2010-2012

Source: LPI, World Bank.
While the Enabling Trade Index (ETI) of the World Economic Forum gives a lower overall ranking to Vietnam, it also shows significant improvement rising from 89th in 2009 to 68th in 2012. The components of the index include two that are relevant to trade logistics: border administration and transport and communications infrastructure. The rankings in terms of border management, efficiency in customs administration (which reflects the performance in customs service, not the procedures) and transparency of procedures index all declined between 2009 and 2012. This is consistent with the findings of the LPI. However, the ranking for transport and communications infrastructure improved significantly as did the subcategories for transport services ICT utilization, and transport infrastructure, even though the latter continues to have a low ranking, 90th in 2012. The results for the Index are summarized in Table 3.1.


<table>
<thead>
<tr>
<th>Component</th>
<th>ETI 2009</th>
<th>ETI 2010</th>
<th>ETI 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Trade Index</td>
<td>89</td>
<td>71</td>
<td>68</td>
</tr>
<tr>
<td>Border Administration</td>
<td>85</td>
<td>88</td>
<td>94</td>
</tr>
<tr>
<td>Efficiency of Customs Administration</td>
<td>117</td>
<td>107</td>
<td>124</td>
</tr>
<tr>
<td>Efficiency of Import-Export Procedures</td>
<td>49</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>Transparency of Border Administration</td>
<td>99</td>
<td>104</td>
<td>105</td>
</tr>
<tr>
<td>Transport and communications infrastructure</td>
<td>71</td>
<td>68</td>
<td>56</td>
</tr>
<tr>
<td>Availability and quality of transport infrastructure</td>
<td>108</td>
<td>103</td>
<td>90</td>
</tr>
<tr>
<td>Availability and quality of transport services</td>
<td>36</td>
<td>31</td>
<td>28</td>
</tr>
<tr>
<td>Availability and use of ICTs</td>
<td>66</td>
<td>59</td>
<td>60</td>
</tr>
</tbody>
</table>


Vietnam’s poor transport infrastructure was also noted in the WEF’s Global Competitiveness Report 2011–12. It ranked below most of the countries in the region for all transport modes as shown in Table 3.2. The country performed lowest in terms of the quality of roads and second to lowest in the quality of port infrastructure (Figure 3.3).

Table 3.2: WEF Regional Rank for Infrastructure, Selected Countries, 2011-2012

<table>
<thead>
<tr>
<th>Country</th>
<th>Quality of Roads</th>
<th>Quality of Railroad Infrastructure</th>
<th>Quality of Port Infrastructure</th>
<th>Quality of Air Transport Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>123</td>
<td>71</td>
<td>111</td>
<td>95</td>
</tr>
<tr>
<td>Cambodia</td>
<td>66</td>
<td>96</td>
<td>76</td>
<td>84</td>
</tr>
<tr>
<td>China</td>
<td>54</td>
<td>21</td>
<td>56</td>
<td>72</td>
</tr>
<tr>
<td>Hong Kong SAR (China)</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>India</td>
<td>85</td>
<td>24</td>
<td>82</td>
<td>67</td>
</tr>
<tr>
<td>Indonesia</td>
<td>83</td>
<td>52</td>
<td>103</td>
<td>80</td>
</tr>
<tr>
<td>Japan</td>
<td>16</td>
<td>2</td>
<td>33</td>
<td>50</td>
</tr>
<tr>
<td>Korea</td>
<td>17</td>
<td>8</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>Malaysia</td>
<td>18</td>
<td>18</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Philippines</td>
<td>100</td>
<td>101</td>
<td>123</td>
<td>115</td>
</tr>
<tr>
<td>Singapore</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Thailand</td>
<td>37</td>
<td>63</td>
<td>47</td>
<td>32</td>
</tr>
</tbody>
</table>

Despite the difficulties with port infrastructure, ocean shipping services have improved as indicated in UNCTAD’s Liner Shipping Connectivity Index (LSCI). This index is based on the number and size of the liner vessels calling at a country’s ports. Between 2004 and 2011, Vietnam, overtook Thailand and Indonesia as illustrated in Figure 3.4. Understandably, it lags far behind the region’s major transshipment hubs, Malaysia, Hong Kong SAR (China), Singapore, and China, which have a much larger volume of trade. However its ranking suggests that shipping demand is growing steadily despite the problems with port infrastructure.

**Figure 3.3: Vietnam Infrastructure Compared with the Regional Average**

![Diagram showing Vietnam Infrastructure Compared with the Regional Average](image)

*Source: Based on WEF Global Competitiveness Ranking Report 2011-2012 data.*

**Figure 3.4: UNCTAD’s Liner Shipping Connectivity Index, 2004-2012**

![Diagram showing UNCTAD’s Liner Shipping Connectivity Index, 2004-2012](image)

*Source: UNCTAD.*
From the logistics operators’ perspective, Vietnam’s market size and growth potential attraction is being hindered by weak infrastructure and transport links. According to different indicators, Vietnam performs above average in terms of market size and growth. Within the region, this is also the case for Thailand, as well other middle-income economies outside the region such as Brazil and Mexico. However, Vietnam’s relative position in terms of market compatibility and connectedness is below the mean, as is the case of Colombia, Bolivia, Kenya and Morocco (Figure 3.5).

Figure 3.5: Market Compatibility and Connectedness

![Comparison of Sub-Indices](image)

Source: Transport Intelligence.

The World Bank’s Doing Business Survey includes measures of the time and cost (excluding tariffs) associated with exporting and importing a standardized cargo of goods by ocean transport. This is used to compute an index for “trading across borders”. In 2012, Vietnam ranked 68th out of 183 economies for this index even though the overall ranking in the survey was 98th. However, its performance is below that of its neighbors, especially with regards to the time required for both imports and exports as shown in Table 3.3. The country has improved over the last five years but the gains have been slow as shown in Table 3.4.

Table 3.3: World Bank’s Doing Business Index 2012 -- Trading Across Borders Data

<table>
<thead>
<tr>
<th></th>
<th>Trading across border Rank</th>
<th>Documents to export (number)</th>
<th>Time to export (days)</th>
<th>Cost to Export (US$ per container)</th>
<th>Documents to Import (number)</th>
<th>Time to Import (days)</th>
<th>Cost to Import (US$ per container)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>68</td>
<td>6</td>
<td>22</td>
<td>580</td>
<td>8</td>
<td>21</td>
<td>670</td>
</tr>
<tr>
<td>Singapore</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>456</td>
<td>4</td>
<td>4</td>
<td>439</td>
</tr>
<tr>
<td>Thailand</td>
<td>17</td>
<td>5</td>
<td>14</td>
<td>625</td>
<td>5</td>
<td>13</td>
<td>750</td>
</tr>
<tr>
<td>Malaysia</td>
<td>29</td>
<td>6</td>
<td>17</td>
<td>450</td>
<td>7</td>
<td>14</td>
<td>435</td>
</tr>
<tr>
<td>Indonesia</td>
<td>39</td>
<td>4</td>
<td>17</td>
<td>644</td>
<td>7</td>
<td>27</td>
<td>660</td>
</tr>
<tr>
<td>Philippines</td>
<td>51</td>
<td>7</td>
<td>15</td>
<td>30</td>
<td>8</td>
<td>14</td>
<td>730</td>
</tr>
</tbody>
</table>

The World Bank’s Doing Business Index 2012 also provides statistics for comparing Vietnam’s logistics cost and time cost with peer countries. While Vietnam’s cost to export is quite similar to other countries in the region, the time it takes to export and import, including document preparation, customs clearance, port handling and inland transportation, is among the highest in the region. Document preparation requires the longest time, accounting for more than 50 percent of the total amount of time to export. The rest breaks into three equal parts, including the time to proceed with inland transportation, customs procedures, and port handling.

**Table 3.4: Doing Business Index for Vietnam -- Evolution of Selected Indicators, 2008-2012**

<table>
<thead>
<tr>
<th>Trading Across Borders data</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>73</td>
<td>74</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Cost to export (US$ per container)</td>
<td>669</td>
<td>734</td>
<td>756</td>
<td>580</td>
</tr>
<tr>
<td>Cost to import (US$ per container)</td>
<td>881</td>
<td>901</td>
<td>940</td>
<td>670</td>
</tr>
<tr>
<td>Documents to export (number)</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Documents to import (number)</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Time to export (days)</td>
<td>24</td>
<td>24</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Time to import (days)</td>
<td>23</td>
<td>23</td>
<td>21</td>
<td>21</td>
</tr>
</tbody>
</table>


The World Bank’s Doing Business Index 2012 also provides statistics for comparing Vietnam’s logistics cost and time cost with peer countries. While Vietnam’s cost to export is quite similar to other countries in the region, the time it takes to export and import, including document preparation, customs clearance, port handling and inland transportation, is among the highest in the region. Document preparation requires the longest time, accounting for more than 50 percent of the total amount of time to export. The rest breaks into three equal parts, including the time to proceed with inland transportation, customs procedures, and port handling.

**Figure 3.6. Comparative Logistics Cost**

3.3 Summary

These indicators provide a mixed review of Vietnam’s logistics performance. While the World Bank’s LPI shows Vietnam favorably relative to countries with a comparable level of per capita income, its overall ranking has not improved significantly. While some dimensions of performance have improved, other dimensions have deteriorated. Of particular concern is Vietnam’s position in relation to its neighbors, China and the countries of ASEAN. This comparison shows Vietnam in unfavorable terms. Whereas these countries, with the sole exception of Thailand, had advanced in ranking terms, Vietnam had not. At least in the area of trade logistics, Vietnam is losing out in trade competitiveness. This argues strongly for efforts to strengthen this area in particular and trade facilitation in general. To do this requires characterization of the various dimensions of trade logistics, including transport modes, corridors and gateways. This is the subject of Chapter 4.
Vietnam has recorded substantial increases in public investment in infrastructure. These increases notwithstanding, its trade-related infrastructure has not maintained pace with the growth of its exports. From a trade competitiveness perspective, Vietnam’s growth potential is being constrained severely by weak transport infrastructure and services. Weak corridors connecting major growth poles to main international gateways, high transport costs, poor quality of transport and logistics services are among key impediments. The over-reliance on public investment, which is clearly “unaffordable, inefficient and therefore unsustainable”\textsuperscript{11} should be changed. To be more efficient, improve the public investment regime, shift to private sector financing, and establish a clear priority for essential investment are all key to enhance competitiveness.

This chapter presents a brief review of the export sector with its major transport issues and then assesses the competitiveness of transport infrastructure and services and other related trade logistic services. It then highlights the constraints and issues and concludes by suggesting key policy directions to improve the situation and support export supply chains.

### 4.1 The Overall Context

Vietnam’s traditional raw material exports like petroleum products and coal have been declining while processed components (manufacturing sector) now comprise more of total exports. In addition, the export of agricultural products, mainly rice, is on the rise, as Vietnam is poised to become the first worldwide exporter of rice. This type of shift has consequences for the transport system. More importantly the type of transport infrastructure required may change. Petroleum products and coal as well as liquid and dry bulk commodities require dedicated port facilities. The export of processed goods and even rice are gradually being entirely containerized and therefore more efficient container port facilities are required.

At least 90 percent of Vietnam’s imported and exported goods are transported by sea with the remaining 10 percent or less being transported by road to bordering countries such as China, Laos and Cambodia.

\textsuperscript{11} World Bank’s Vietnam Development Report, 2012
Only a small volume of high-value goods (mainly electronics, some footwear and textile products) is transported by airfreight. Therefore, this chapter emphasizes port infrastructure, port logistics and shipping. However, the inputs for processing and the domestic production for exports follow specific corridors through Vietnam and use different modes of transport infrastructure and logistic services. Thus, it is important to review the adequacy of the transport and logistics patterns along the domestic corridors to assess trade competitiveness.

Due to historical and geographical reasons, the spatial distribution of economic activities and trade flows in Vietnam are arranged around three major and a few secondary development clusters, linked by a number of key multimodal corridors.

The primary development clusters are geographically located in the northern, central and southern centers. These form three focal economic zones (FEZs) where economic activities in general and production and processing of exported goods in particular are concentrated. The primary development clusters (also known as FEZs) are linked through main corridors with multimodal networks of road, railway, seaway, and air routes to key international gateways. Apart from the primary clusters, there are two types of secondary clusters. The first is located around and between primary clusters or along coastal areas. The second is located in mountainous areas, constituting upland clusters, with limited economic activities.

As outlined in Chapter 2, Section 4, Vietnam’s trade is structured along three main types of exports, including primary products (oil and other natural resources), resource based products (agricultural resources), and medium- or low-technology products as described below:

- Manufactured products for export, which utilize large volumes of imported inputs, have plants located in FEZs with industrial and export processing parks in the north and south. Most of the inputs come by sea with some originating from domestic markets and eventually from neighboring countries by truck. Imported and exported goods are mostly containerized moving by sea or by air. The main goods in this form include textiles and garments, footwear, electronics, and wooden products.

- Primary natural resources goods for export and import such as crude oil and petroleum products in the south (for both export and import), and coal in the north (export). The trade flows of these goods require dedicated logistics and transport infrastructures.

- Resource-based goods including agricultural products for export such as rice, coffee, rubber, and seafood products are transported in bulk, break bulk or containers. Goods move from production areas (scattered along all three FEZs) to ports with some exports sent to China by road or rail.

Figure 4.1 shows the structure of FEZs and the significant economic activities are highlighted by dark blue, representing provincial gross output of industry, agriculture and service, and the international gateways and corridors to connect FEZs with international markets.

- The southern FEZ is the most dynamic region, centered on Ho Chi Minh City (HCMC), and surrounded by Binh-Duong, and Dong-Nai provinces. The exports and imports flow in and out of this region through primary international gateways (Sai-Gon Ports, Vung-Tau Ports, and Tan-Son-Nhat airport) to the most important export destinations and import sources, and through secondary international gateways (inland border gates Moc-Bai and Hoa-Lu) to Cambodia.

- The northern FEZ is the second important economic cluster, covering Ha-Noi (the country’s capital), Hai-Phong city, and Quang-Ninh province. Trade flows mainly through primary international gateways (Hai-Phong Port and Noi-Bai airport) and international gateways (inland borders in Lang-Son and Lao-Cai). These gateways cover a considerable portion of trade, in particular to and from mainland China. There are three main corridors within this region: the Ha-Noi – Hai-Phong corridor (road and railway), the Ha-Noi – Lao-Cai corridor (road and railway) and the Ha-Noi – Lang-Son corridor (road and railway).
The central FEZ is a less vibrant cluster in terms of economic activities. It is located in the central part of the country, covering Da-Nang City and Quang-Nam province. Trade flows in and out of this region through secondary international gateways, including Chan-May port, Da-Nang port, Quy-Nhon port, Da-Nang airport, and Lao-Bao inland border crossing to Lao People’s Democratic Republic (Lao PDR).

In addition to the above primary development clusters, economic activities are also located in less important areas situated along the coastline, in between primary clusters, and in the mountainous areas. Such secondary development clusters are classified as coastal and upland clusters.

**Figure 4.1: Development Clusters and Corridors, and Trade Flows**

*Source: Freight flows data provided by TDSI.*
The costal clusters cover the Red River Delta (Thai-Binh, Nam-Dinh, Ninh-Binh), the North Central Area (from Thanh-Hoa to Quang-Tri), the Central Coastal Area (from Phu-Yen to Binh-Thuan), and the Mekong River Delta. These clusters are interconnected and linked with primary clusters by coastal waterways and roads including National Highway 10 (NH10), NH1A, and the inland waterway network. There is also a secondary international gateway (Tinh-Bien) for inland waterways to Cambodia. The North – South corridor connects these clusters with the rest of the economy by road (NH1A), by railway (North – South railway route), by sea and air (Noi-Bai, Da-Nang, Tan-Son-Nhat airports).

The upland clusters, including the Northern Midland, Mountain Area, and Central Highland are interconnected and linked with the rest of the economy mainly by road. The ring road NH4 (NH4A, B, C, D, E, G), NH279 and NH6 is the main corridor for Northern Midland and Mountain Area, while the Central Highland connects with the rest of economy through Ho-Chi-Minh highway and NH14. There are also secondary international gateways such as inland border gates Cau-Treo, and Lao-Bao to Lao PDR. The North – South upland corridor connects these clusters to the rest of the economy by road (Ho Chi Minh road, NH14), and by air (Na-San, Buon-Me-Thuot airports).

There are nine corridors in the Greater Mekong sub-region and four of these pass through Vietnam via what are referred to as secondary inland international gateways. Probably the most important is the **Eastern Corridor** which connects (through road and rail) Kunming (PRC) to Ha-Noi and HCMC before terminating in Ca-Mau in the Mekong Delta. This corridor has a branch connecting Nanning (PRC) with Hai-Phong and Ha-Noi. The Lao-Cai border crossing point (BCP) to Yunnan (PRC) handles approximately one million tonnes and is known to be the most active land BCP in Vietnam. The **East West Corridor** connects Mawlamyine (Myanmar) with Mukdahan (Thailand) and Savannakhet (Lao PDR) and crosses into Vietnam at Lao-Bao before reaching Da Nang Port. Traffic on the corridor is limited, with volumes of between 375,000 and 400,000 tonnes reported at the Lao-Bao BCP (valued at US$150 million). The **Southern Corridor** connects Dawei (Myanmar) with Bangkok, Phnom Penh and crosses into Vietnam at Ba-Vet/Moc-Bai before reaching HCMC and Vung-Tau. Total trade at Moc-Bai BCP was reported to be approximately 110,000 tonnes per year or US$300 million. There is also a **South Coastal Corridor** linking Bangkok with the west coast of the Mekong Delta, but this is rarely used.

Despite improvements in transport infrastructure connectivity, the Greater Mekong Sub-region (GMS) corridors are not major trade routes for Vietnam. In 2009, it was reported that only 6.5 percent of the total value of exports was with GMS countries\(^\text{12}\) and most of the exports were probably by sea (petroleum products to Thailand and Cambodia, and coal to China) with only a small portion traveling by land. When measured in volume (tonnage), the share would be higher because of the type of products exported. As land corridors only play a minor role in exports, the most important consideration for trade logistics is the performance of the Vietnam’s seaports. However, this does not mean that land or inland waterway transportation is not significant.

There is not yet an efficient and effective transport corridor linking the two dynamic primary clusters of economic development, the Ha-Noi – Hai-Phong cluster and the HCMC cluster. The existing road (NH1) remains congested despite improvements and the expressway is still largely under construction. The railway infrastructure needs major rehabilitation and modernization to support effective freight movements between the North and the South. However, because development in the North and in the South have continued to originate from clusters around the two big cities of Ha-Noi and HCMC, largely working independently, the weakness of the transport infrastructure link has not been a serious obstacle to the growth of exports.

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\(^\text{12}\) Total exports with GMS countries were only $4.1 billion out of $63 billion in 2009.
4.2 Transport Sector Infrastructure

Sector Overview

Before assessing the support of the transport infrastructure to export growth, a short overview of the sector is helpful. In transport, the road sector is the dominant mode in freight transportation in Vietnam. In terms of total tonnage, it accounts for 74 percent with inland waterway transport also playing a significant role (18 percent), but with the rail and air sector having only a minor role. In terms of total transport, the maritime sector is the primary mode with 145 billion tonne-km or 67 percent of the total. The railway sector has only a two percent share, while road and inland waterway each have about 15 percent. Notwithstanding institutional reforms and improvements in the management of the rail and road subsector, planning and development remain separate and despite recurrent cross references, multimodality receives little attention.

There remains a significant gap in investment in transport infrastructure. Over the past 15 years, freight transport has been growing on average 12.1 percent per annum and trade 18 percent per annum but the level of annual investment in transport infrastructure is equivalent to only 3.1 percent of GDP (average 2009-2011), far below the average for other countries with the same level of development. Vietnam has been over-reliant on public investment, which has been found to be “unaffordable, inefficient and therefore unsustainable” (Vietnam Development Report -- VDR, 2012). If not redressed, this situation can only deteriorate as exports are expected to triple by 2020 compared to the level of 2010.

Road Subsector

Vietnam has an extensive road network of more than 256,000 km, but only about 17,000 km (seven percent) are national highways, and only about 23,000 km (nine percent) are provincial roads. Although the overall road density is high (0.78 km/km2 compared with Thailand’s 0.38), the density for the national highways is low, 0.05 compared to 0.11 in Thailand. Another significant characteristic of the network is its limited capacity; approximately 90 percent of the national roads have only two lanes.

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13 This section borrows material from “Vietnam Transport Sector Assessment Strategy and Road Map”, ADB 2012.
This lack of capacity and coverage is compounded by the condition of the roads. About 94 percent of the national highways are paved, but only about 43 percent are in good condition, 37 percent are in average condition, and 20 percent are in poor to very poor condition. Provincial and local roads are, as expected, in worse condition than the urban and national roads. The condition of local and provincial roads affects export competitiveness, especially for agricultural products such as coffee, rubber, wood products and rice.

The NH1A is the backbone highway traversing the country from North to South. It starts at Lang Son on the Chinese border and continues south through 30 provinces/cities including Ha-Noi and HCMC and ending in Ca-Mau. The total length is 2,434 km, with mostly two lanes but with some four lane sections. Sections within a 200 km radius of Ha-Noi and HCMC have experienced a significant increase in traffic volumes14 due to rapid development of economic activities, especially on the Ha-Noi – Lang-Son, Ha-Noi – Thanh-Hoa, Dong-Nai – HCMC and HCMC – Can-Tho sections.

Vietnam has made significant progress in the past six years in improving the transport efficiency of its road and highway networks, and is beginning to improve its expressway network but significant work remains. A new HCMC – Trung-Luong (Tien-Giang Province) expressway (62 km) has recently opened carrying an average 40,000 vehicles a day. However, due to the perceived high tolls,15 traffic has been less than expected even where travel times have been reduced by 40 minutes.

The initial phases of upgrading NH1A have been completed, but as traffic volumes continue to increase, additional widening and strengthening of the roads and widening of bridges will be required in the near and mid-term future. Vietnam has also upgraded, and will continue to upgrade, a number of road links running westward from this corridor, connecting to Cambodia, the Lao PDR, and China.

**Railway Subsector**

The railway network in Vietnam consists of 2,525 km of track, of which 2,124 km between HCMC and Lao-Cai are meter-gauge track, while the 163 km section between Ha-Noi and Dong-Dang, connecting to Nanning in China, is dual-gauge. There is also a 162 km section of standard-gauge tracks linking Ha-Noi to Kep and Quan-Trieu. The main line is a 1,726 km track linking HCMC to Ha-Noi. As shown in Figure 4.2, the railway network does not carry much freight (approximately one percent of the tonnage) and has a limited role in passenger transport accounting for only seven percent of the total traffic.

The railway network is operated and maintained by Vietnam Railway (VNR), a state-owned enterprise (SOE). VNR has recently been converted into a corporation, and private train companies (joint stock companies) have been formed, providing limited passenger, freight, and infrastructure maintenance services. The Vietnam National Railway Administration (VNRA) is responsible for developing the sector, constructing new lines, and securing resources for infrastructure maintenance. VNR pays 10 percent of its gross revenues to VNRA as a track access charge. These funds are generally used for infrastructure maintenance.

Despite efforts to modernize the railway system, it has not played a major role in economic development or the growth in exports. The institutional arrangement has been improved but private investors have shown little interest in the railway system.

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14 For instance, vehicle volume on the Ha-Noi – Thanh-Hoa section is about 32,000 vehicles/day-night, including 6,000 trucks and 1,500 container trucks, with an average increase rate of 14 percent/year, which results in frequent traffic congestions. Traffic flow on Dong-Nai - HCMC section is the highest in Vietnam. Surveyed data of 2010 shows that total vehicle volume across the station was 99,500 vehicles/day-night, including 22,200 trucks and 21,400 container trucks, accounting for nearly 40 percent of total volume on the section. On the HCMC – Can-Tho section, vehicle volume has been high, serving travel demand from the Mekong delta region to HCMC and vice versa. In particular, on the Tan-An section, the surveyed vehicle volume was 88,900 vehicles/day-night; however, these were mainly motorbikes, while the number of container trucks on the section was 3,300 vehicles/day-night.

15 The toll was VND 4,000 for 10-18 tonnes truck or 20’ container and VND 8,000 for 40’ container trucks making the one way travel on expressway about US$10 for 20’ container and US$20 for 40’ container.
**Inland Waterway Subsector (IWT)**

The total length of inland waterway used for transport is 17,178 km. The network is divided between the Red River Delta in the north and the Mekong Delta in the south. It connects industry, agriculture and large cities to the main seaports and plays an important role in domestic transport, especially in the Mekong Delta region.

IWT competes with road for freight in both deltas. Although the transport costs are less than half of road cost, the travel times are much longer and most trips require an intermodal connection. Construction material, petroleum products, coal, cement, rice and fertilizer are the main commodities carried by IWT. Recently, container services using river barges have been introduced between HCMC and My-Tho and Can-Tho in the Mekong Delta to compete with road transport and reduce the lead time for exports to the EU and the United States.\(^{16}\) There are also a motorized barge services from Saigon Port to Phnom Penh Port carrying up to 55 TEUs.

In the Mekong Delta, the inland waterway network has the largest share of freight traffic because of the coverage of its river and canal network. It carries as much as 70 percent of the total freight volume of the whole region. There are six main canals in the Mekong Delta, four of which connect with the Cho-Gao Canal, the arterial route to HCMC. The canal accounts for 70 percent of the total goods transported by inland waterways in the delta with a volume of 47 million tonnes in 2011.

The most common barges on the Cho-Gao Canal are in the 100–300 DWT range while the average barge capacity for Vietnam is only 80 DWT. This compares with 1,300 DWT in the Netherlands and shows that there is considerable scope for scaling up. More intensive use of IWT\(^ {17}\) and coastal shipping, particularly when efficiently linked to other transport modes (e.g., trucks for short-distance haulage) and logistics services (e.g., warehousing), can produce significant cost reductions not only for users of, and shippers on, the waterways, but also for the wider community with reduced freight and non-freight vehicle operating cost, time savings, accident and fatality reduction, and less environmental degradation.

**Seaports Subsector**

As 90 percent of Vietnam’s exports move by sea, it is essential for the country to have a well-functioning port system. There are currently 80 ports in Vietnam and these have been combined into three regional groups: the North (Hai-Phong and Quang-Ninh), the Central region (Da-Nang, Quy-Nhon, Nha-Trang) and the South (HCMC, Dong-Nai and Ba-Ria – Vung-Tau). The latter is a complex of different river ports that handles about 65 percent of all goods shipped by sea. The Hai-Phong – Quang-Ninh group accounts for another 24 percent. Most of the other ports are located along the coast separating the North and the South economic clusters and are used primarily for coastal shipping.

The total volume of cargo passing through Vietnamese ports was 259 million tonnes in 2010 rising to 290 million in 2011. The average annual growth rate has been 13 percent during 2005–2011. Container traffic has continued to increase, reaching 6.52 million TEUs in 2010 with approximately 4.5 million coming from South ports near HCMC and 1.5 million from the Hai-Phong complex of ports.

\(^{16}\) Barge will carry 24 to 36 TEUs and is said to have reduced the lead time for export to the EU and the United States from 30-45 days to 20-27 days because of direct delivery to HCMC port avoiding delays of going through HCMC city. This fact is mentioned in “Facilitating Trade through Competitive Low Carbon Transport: The case for Vietnam’s Inland and Coastal Waterways”, World Bank August 2011.

\(^{17}\) This conclusion comes from same reference as footnote 6.
The main characteristics of the North and South port complexes are presented in Table 4.1. Major changes have recently occurred in the South. Saigon Port has a long history of congestion and has experienced increasing difficulties in receiving and sending goods through the dense traffic of HCMC. In addition, draft limitations have prevented Post-Panamax container ships from calling at the port. To address these problems, a series of new container ports, referred to as Cai-Mep ports, were developed. Some began operation in 2009-2010 while others are still under construction. The design capacity of these new container ports is 6.5 million TEUs resulting in a total of over 10 million TEUs for the HCMC system of ports. Many of these new ports have been built through joint ventures with private interest. They all well-equipped and have sufficient container yards.

### Table 4.1. Vietnam Main Seaport Characteristics, 2010

<table>
<thead>
<tr>
<th>Name</th>
<th>Tons (million)</th>
<th>TEU (thousand)</th>
<th>Length of Berth (m)</th>
<th>Warehouse (ha)</th>
<th>Yard (ha)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CFS</td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Container</td>
<td>Other</td>
</tr>
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<td><strong>North Region</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hai-Phong Port</td>
<td>15.6</td>
<td>954</td>
<td>3,347</td>
<td>0.7</td>
<td>2.8</td>
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<td></td>
<td></td>
<td></td>
<td>24.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Dinh-Vu Port</td>
<td>3.7</td>
<td>399</td>
<td>425</td>
<td>0.4</td>
<td>0.4</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>10.5</td>
<td></td>
</tr>
<tr>
<td>Cai-Lan Port</td>
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<td>204</td>
<td>926</td>
<td>0.5</td>
<td>0.5</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>4.9</td>
<td>9.3</td>
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<tr>
<td><strong>South Region</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sai-Gon Port</td>
<td>11.8</td>
<td>402</td>
<td>2,745</td>
<td>5.4</td>
<td>16.0</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>VICT Port</td>
<td>3.1</td>
<td>298</td>
<td>678</td>
<td>0.8</td>
<td>10.0</td>
</tr>
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<td></td>
<td></td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>Ben-Nghe Port</td>
<td>4.4</td>
<td>216</td>
<td>816</td>
<td>1.0</td>
<td>20.0</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>New Port – Cat-Lai</td>
<td>38.0</td>
<td>2,850</td>
<td>1,189</td>
<td>1.7</td>
<td>65.0</td>
</tr>
<tr>
<td>Hiep-Phuoc</td>
<td>1.2</td>
<td>96</td>
<td>500</td>
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<tr>
<td>New Port – Cai-Mep</td>
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<td>-</td>
<td>890</td>
<td></td>
<td>48.0</td>
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<tr>
<td>SP-PSA Port</td>
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<td>600</td>
<td></td>
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<tr>
<td>CMIT* Port</td>
<td>-</td>
<td>32</td>
<td>400</td>
<td></td>
<td>24.0</td>
</tr>
</tbody>
</table>

* Figures for the first 8 months of 2011

**Source:** Ministry of Transport.
In 2010 and 2011, over 90 percent of the South region container traffic continued to move through the berths located along the Saigon River. Only 500,000 TEUs were handled at Cai-Mep ports in 2010 with 700,000 expected in 2011 and logistics problems explain this relatively poor performance.

The Saigon New Port (SNP) plays a central role in Vietnamese trade, with traffic of more than 2.8 million TEUs. SNP also operates the new Tan-Cang – Cai-Mep sub-port. The latter is the only terminal with direct container routes to the North American market, and is served by international shipping lines such as APL, MOL and Hanjin. Maps of Saigon Ports and Cai-Mep Ports are given in Figures 4.3 and 4.4.

![Figure 4.3: Sai-Gon Ports](image-url)

Source: TDSI.
Air Subsector

Airfreight has been experiencing rapid growth, although Vietnam still lags behind other countries in the region in terms of infrastructure quality and capacity. During the past decade, traffic growth at airports has averaged 11.4 percent, 13.7 percent and 6.9 percent in passengers, cargo and aircraft movements, respectively. In 2011, the volume of air freight was 474,000 tonnes. As Vietnam moves to higher technology export products, more cargo will be transported by air, and transport and logistics services would need to improve significantly to meet the raised demand.

4.3 Transport and Logistics Services

4.3.1 Transport Corridors of Export Commodities

The TTFA examined six of the top ten export commodities -- rice, coffee, seafood, apparel, textiles, footwear, and electronics. These are gaining importance as the share of primary resource exports decline in Vietnam. The transport flows for these are shown in Figure 4.5. The total value of exports is indicated by the intensity of blue in the provinces while the thickness of the red flow lines shows the volume of TEUs for export. The figure also shows the distribution of the production of these six commodities.
Figure 4.5 Transport Flows of the Six Commodities, 2010

Source: Freight flows data provided by TDSI.
In 2011, Vietnam exported 7.1 million tonnes of rice. About 90 per cent of rice exports are produced in the Mekong Delta Region, with 83 percent transported from the Mekong Delta Region to HCMC by inland waterways and a small volume by road through NH1A and the HCMC – Trung-Luong expressway. Most of the rice is trans-shipped directly for export using the Cat-Lai Port in HCMC with a small proportion transiting through the inland container depots (ICDs) of HCMC and Dong-Nai (600,000 tonnes out of 5.6 million tonnes). Delivery to ports and ICDs suffers from delays because of congestion on waterways and roads. However, it is expected that a larger share will be exported through Can-Tho Port to relieve HCMC ports. The planned waterway channel that will connect the Mekong Delta to the sea and which will permit direct exports through the modern facilities of Ba-Ria – Vung-Tau ports will be extremely important.

Coffee is harvested in the Central Highlands. Almost all exports are by sea (to the major markets of the United States, Germany, Italy and Japan) with a small volume crossing by land to China (0.2 percent). About 90 percent is exported via the HCMC seaports, primarily Cat-Lai. The coffee beans are transported by road from production centers through two corridors. First, on NH14 across Kon-Tum, Gia-Lai, Dak-Lak, Dak-Nong provinces and then via NH13 through Binh-Phuoc, and Binh-Duong to reach HCMC and second on NH20 from Lam-Dong to Dong-Nai and then on NH1A to HCMC. Delays due to congested roads are frequent complaints.

Most of the seafood exports originate in the Mekong Delta region (Kien-Giang, Ca-Mau and Bac-Lieu provinces) and are transported to HCMC by road on reefer trucks. Various national highways (NH1A, NH30, NH53, NH60, NH80 and NH91) are used depending on the location of the processing plant in the delta. Most of the production is exported through Saigon ports with small proportions through Hai-Phong port, Quang-Ninh’s ports and border gates, Tien-Sa and Da-Nang ports and Ba-Ria – Vung-Tau’s ports. Only 1.8 percent of the production is sent by air cargo.

From 2006 to October 2011, the apparel and textile industry contributed 15 percent to the annual total exported value of Vietnam. Vietnam’s apparel and textile export markets are diversified across 54 nations in the world. The United States was the main export market, accounting for 55 percent of the total exported apparel and textile value. Although Vietnam’s apparel and textile enterprises are scattered nationwide most are located in the Red River Delta and the South East, which account for 83 percent of total exported apparel and textile products. Eighty percent of apparel and textile products are exported by sea, thirteen percent by air and seven percent via road through land BCPs. Fifty-seven percent of the apparel and textile volume was exported via HCMC. Imported textiles and other inputs arrive by sea and are shipped by road to production centers. Exports are transported by road from the factories to the ports and airports using the national highways converging to NH1A.

Footwear exports are shipped by sea to the traditional markets in the United States, EU and Japan. The imported inputs are shipped primarily from Asian countries via HCMC ports (59 percent), Hai-Phong Port (32 percent), Tan-Son-Nhat airport (five percent), Noi-Bai and Gia-Lam airports (two percent). Raw imported material and finished products are transported between import/export points to production centers by road. The time for customs clearance of imported raw material is 1-15 days or longer if it concerns special material inspection on chemicals at the Quality Inspection Center of the Customs Department (30 days). Custom clearance is mainly at seaports (87 percent), airports (nearly 10 percent) with some at land BCPs or ICDs. Customs clearance for exports is carried out at seaports (more than 50 percent), at ICDs (20 percent) and airports (5 percent). Exports are mainly through HCMC ports (73 percent), Hai-Phong port (19 percent), Tan-Son-Nhat airport (4 percent), and Noi-Bai airport (1 percent).

The electronic industry involves mostly FDI enterprises that import parts, assemble intermediate and final products and export them back to their owner’s country or to markets in other countries, or export them. China accounts for 20 percent of the total exported electronics value of Vietnam, followed by the United
States (16 percent), Japan (8 percent), EU (11 percent) and ASEAN countries (11 percent). A total of 92 percent of the products and parts are exported from the North region, of which 98 percent are shipped through Hai-Phong port and the remainder through Noi-Bai airport. The imported parts and exported products travel between the ports/airport and the factories by road.

What could be learnt from the above? Apart from rice, which is transferred to the ports directly using waterway systems, the movements of raw material and export products are all by road. Trucking causes a variety of problems for all of these products. Bags of coffee travel a relatively long distance on bad roads. Seafood processing plants complain that it is difficult to locate trucks to send their products on time to ports forcing them to acquire their own fleet. Exporters and freight forwarders complain of high transport costs claiming that trucking costs from ports to Ha-Noi or HCMC are expensive. Finally, it is notable that ICDs are used sparingly by exporters probably because they do not offer useful logistics services.

**4.3.2 Logistics Services**

Total logistics costs in Vietnam are estimated to be 20 percent of GDP (equal to US$20 billion). This figure is high and only comparable to 19 percent in Thailand but also indicates the importance of logistics in domestic and international trade. Vietnam has about 600 and 800 logistics service providers with about 1,000 working solely as freight forwarders. A large number are small enterprises with limited staff (15 to 30). Many of the freight forwarders limit their activities to customs clearing and simple shipment orders. There is intense competition between these small operations as they are capable of only getting a small share of the market (20 percent). The big share of the market goes to larger firms, which are either joint ventures with global logistics players or Vietnamese agents of international firms. According to current regulations, foreign firms can operate in Vietnam only under a Joint Venture agreement (51 percent ownership by Vietnamese). After 2014, when Vietnam complies with the provisions of the WTO on liberalizing the logistics industry, international logistics companies will have the right to register 100 percent owned share companies.

There are some government logistics firms: Vinalines, Viconship, Vietrans, Vinafreight and some joint stock companies: South Logistics JSC (SOTRANS), Vinatrans JSC, Gemadept JSC, as well as newly established companies that belong to port management companies such as Tan-Cang Logistic (under Saigon New Port). The larger companies like VIETFRACHT offer a full range of services including, clearing and forwarding, consolidation and distribution, warehousing, trucking and tracking, and in some cases ship agency.

The market is dominated by 20 international logistics agencies including APL logistics, Maersk logistics, NYK, OOCL, Yusen, and Schenker. These firms offer not only a range of services but also an international network of offices, strong finance, and modern IT systems. Large multinational shippers such as Nike, Adidas, Nortel, etc. prefer to use international logistics firms. Despite the progress of the industry and the intervention of more international players, logistics fees in Vietnam are reputed to be among the highest in the world due to the poor condition of transport infrastructure.

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18 The assessment of the performance of the Logistics Industry in Vietnam is based on a number of references, with the principal being: *Report on Trade Logistics in Vietnam, ASEAN Study*; EU-Vietnam Multilateral Trade Assistance Project, April 2011.
4.4 Constraints and Limitations of Transport and Logistics Infrastructures and Services to Respond to Export Oriented Sector

4.4.1 Poor Quality of Transport Services

The trucking industry still operates on a small scale, with most companies having only two or three trucks and limited geographic coverage. According to a JBIC 2000 survey 19 out of 28 export orientated companies used in-house transport services and staffs because local transport companies could not meet contracted delivery reliability. Damages and losses during transportation are cited by coffee exporters. Seafood exporters, in particular, stress the problem of availability of reliable transport services to bring products to export centers as a serious limitation.

The poor quality of freight services of the railway network, with insufficient schedule control and traceability limiting rail freight primarily to bulk commodities, has been noted. The railway network is limited in capacity due to poor track maintenance, deteriorating bridges and other bottlenecks. For freight trains, the average rail speed rarely exceeds 50 km/h. The ports in HCMC lack rail connections, although some ports in the north have connections. Only recently have container block trains begun operating between Hai-Phong and Ha-Noi. A positive development is the expressed desire by the government to rehabilitate the whole operation and its infrastructure.

Most major container shipping lines operate in Vietnam and in 2010 more than 40 foreign shipping lines were active in the import-export shipping market. These lines maintain activities through a local agent, a joint venture, or in a few cases, a company with 100 percent foreign ownership. In most cases, they offer feeder services with trans-shipment in Hong Kong SAR (China) and Singapore. Only the regional lines operate direct services.

The objective of building modern deep sea container terminals in Cai-Mep in Ba-Ria – Vung-Tau was to attract direct calls by the larger container shipping lines. Currently, a number of these companies now offer direct services to the United States (Grand Alliance, OOCL-Hong Kong SAR (China), Hapag-Lloyd, and NYK Line). The international port SP-PSA (at Ba-Ria – Vung-Tau) announced four calls a week with vessels up to 9,038 TEUs and a transit time to the United States, West Coast of 16-22 days. Tan-Cang – Cai-Mep port offers direct container services to Europe and North America. In the first five months of 2009, it handled 100,000 TEUs from ships arriving directly from Europe and North America.

There are only a few Vietnamese container shipping lines. These provide mostly domestic services on the Hai-Phong – HCMC route. Lines with more experience (Gemadept, Vinalines, and Bien-Dong) also offer feeder services to regional hub-ports like Hong Kong SAR (China) and Singapore. Due to their restricted networks, Vietnamese container shipping lines carry only a small percentage of the trade volume.

4.4.2 High Transport Costs

Most of exporters of the six commodities complain about high transport costs, especially trucking costs. The cost per km quoted by transporters for a 20 ton truck varies between US$1.5 and US$2.75. These costs vary with cargo type, distance and congestion along the route. Higher costs are usually quoted for road transportation from port to city destinations in Ha-Noi and HCMC. This is because the routes are generally shorter and more congested and the time spent at the port is longer. Truck operators also mention the cost of fuel as a reason for the higher rates.

20 Fuel usually accounts for 30 to 45 percent of vehicle operating costs for trucks.
Government tolls on expressways are perceived by road users to be excessive. Despite the recent discount, these are higher than those charged on Thai and Malaysian expressways.

Shipping rates to distant foreign markets (EU and the United States) are competitive and Vietnamese ports remain competitive. The container lift charges at Saigon port are only US$27 for a 20-foot and US$45 for a 40-foot container. These are slightly higher than Laem Chabang port in Thailand (US$26 for a 20-foot and US$45 for a 40-foot) but far lower than Singapore (US$117 and $162). The charges at Cai-Mep ports are higher but still competitive at US$41 and US$63 for a 20-foot and 40-foot container.

4.4.3 Road Infrastructure

Too many provincial and local roads are unpaved and in bad condition. These cause delays to road users and contribute to high vehicle operating costs. For example, this is a serious problem for the transportation of coffee from the Highlands. Although national highways are paved there is a general serious capacity problem for the whole road network. Most of the national highways suffer from congestion as too often they consist of two lanes only. Road construction costs are high and the program of widening roads to four lanes is behind schedule as building a tolled expressway is a time consuming task. However, this work is needed as the expansion of the road network is not able to cope with the increased traffic and the situation is even more of a concern in cities like Ha-Noi and HCMC.

Although evidence is hard to collect, it is generally accepted that many roads suffer from truck overloading. For road safety and road asset protection, bridge weight limitations and speed limits have their relevance. There is, however, a perception that cases of excessive restrictions negatively affect trucking operations.

4.4.4 Access to Ports by Roads

The underdevelopment and poor access to seaports has also limited the importance of maritime transportation in Vietnam. In HCMC the majority of the port traffic still comes from Saigon Port with its series of terminals along the river. To access these terminals, trucks must pass through the city where the prevailing congestion increases delivery time, especially for containers trucks to exporters.

The situation is different for Cai-Mep ports in the Ba-Ria – Vung-Tau area. The terminals are located 80 km from HCMC but are connected through NH51, a four-lane highway. The increase of container traffic has led to the decision to widen the road to six lanes and the on-going construction continues to cause delays. However, the underlying problem is the lack of effective feeder roads between NH51 and the different port terminals. In addition, there are no railway connections to any of the Saigon and Cai-Mep terminals.

4.4.5 Access to Seaports through the Canal Network

As discussed, in the Mekong Delta, four of the main canals converge to one unique canal, the Cho-Gao canal, in order to reach the different Saigon river ports. The Cho-Gao canal is 28.5 km long with one middle section of 11.7 km. This has a bottom width of 25 m and a least available depth of 2.5m. Average daily traffic along Cho-Gao canal is 1,350 barges/ships and 15 passenger ships. Since 2009 MOT has established traffic regulation stations and although congestion has been reduced it remains a serious problem affecting, among other things, the rice export supply chain (see Box 4.1).

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21 There are many port charges but the charge for lift up container is usually a good indicator.
The Cho-Gao canal is one of Vietnam’s most heavily transited waterways connecting the Mekong Delta Region and HCMC. Constructed in 1877 and operational since the early 1900s, the canal is 28.6 km long. The canal is relatively narrow but critically positioned linking the much wider, higher-capacity Tien and Vam-Co rivers at each end of the canal. Increasing traffic levels and expanding average vessel sizes over the past several years have rendered the canal the most critical bottleneck for waterway cargo transport in the region. The resulting congestion has not only increased logistics costs for regional and import-export shippers but has also led to unsafe navigation (e.g., higher collision and wreckage rates) and heavy bank erosion (with serious environmental and social implications). In 2001, under the World Bank-financed Vietnam Inland Waterways and Ports Rehabilitation Project, the canal was formally dredged and upgraded to meet Class III standard for national inland waterways. Since the completion of those works, freight volumes through the canal increased from 16.9 million tons in 1995 to 65.0 million tons in 2010. Today an average of 1,400 vessels varying in size from 200 DWT to 1,000 DWT traverses the canal each day, with peak volumes closer to 1,800 vessels per day. Despite considerable capacity constraints at Cho Gao, the alternative routes to/from HCMC and Can-Tho remain far less desirable for shippers. An option for shippers could be to bypass HCMC ports and use Can-Tho as a gateway for Mekong Delta trade. However, large vessels face severe restrictions entering Can-Tho ports, as the Dinh-An estuary remains alluvial. Upgrading Cho-Gao canal to Class II (bottom width = 80m, least available depth H = 4 m, radius R = 500m, clearance T = 9 m) was estimated to cost 4221 billion VND (US$211 million). Three years after approval, little has been achieved and this is why the World Bank has been asked for assistance. The question is still under study by the World Bank, as it is now perceived that the issue might be broader and may require a network approach in order to avoid a situation where congestion has just been moved forward.

4.4.6 Inland Container Depots (ICDs)

In 2010, only 10 percent of exported and imported goods from Northern provinces passed through ICDs and inland customs clearance points. The rest of the goods were transported directly from owners’ warehouses to ports, with customs procedures completed at the ports. In general, the development of ICDs in the North has occurred without appropriate planning. They are often small with limited operating areas, poorly equipped and lacking rail access. Only Thuy-Van ICD and Lao-Cai ICD have rail connections. Links with shipping firms are limited and ICDs close to ports do not operate efficiently.

As of 2010, the South had nine ICDs. Unlike the North, these are not located on transport corridors, but mainly in HCMC and Dong Nai (an area adjacent to HCMC with a high density of industrial parks). The South has promoted the development of ICDs with cargo clear customs outside the port areas. Their ICDs operate effectively, connecting with ports and shipping companies, consolidating goods from the Central Highlands and the South East region and regulating containers going to the ports. In 2010, 40 percent of the containers shipped through the region used ICDs. The ICDs located near the inland waterways account for 35 percent of the total transport of goods to and from the seaports, thereby helping to reduce road congestion. Maps of ICDs in the North and in the South are presented in Figure 4.6 and 4.7.

Figure 4.6: Map of ICDs in the North

![Map of ICDs in the North](image)

Source: TDSI.

The problems facing the ICDs are different in the North and the South. In the North, though mostly located on the Hai-Phong – Ha-Noi corridors, the ICDs have low utilization and are considered to be inadequate. In the South, ICDs near Saigon port terminal and HCMC are used more effectively, but there are no ICDs among the Cai-Mep container terminals in Ba-Ria – Vung-Tau. Also, there are no large logistic centers located near the container port terminals in Hai-Phong and in Cai-Mep to provide a broader range of logistics services.
4.5 Policy Conclusions and Recommendations

The Changing Context

The policy recommendations presented below address the constraints introduced by the available transport infrastructure and services. These recommendations are made in anticipation of the observed changes in the trade pattern and domestic trade flows.

It is expected that the share of bulk exports (coal and oil products) will decline and container traffic continue to expand, especially for high value products which require better quality transport and logistics services. With greater connectivity to neighboring countries (Cambodia, Lao PDR, South China’s Yunnan Province and Guangxi Autonomous Region), Vietnam will have an opportunity to become an efficient regional hub for their exports. An increase in domestic North – South trade is expected to result from greater utilization of the domestic inputs in the complex export process (see Box 4.2).

These developments confirm the need for competitive and efficient container facilities and logistics in Hanoi and HCMC area.
The forecast is for inter-regional freight flows (N-S, N-C and S-C) to grow more than intra-regional flows (N-N and S-S) (fourfold versus threefold over the next 10 years). Domestic trade is expected to triple in value from 2010 to 2020. An increase in average unit value of exports will require higher quality logistics services. A larger proportion of domestic inputs in for production of many of the exports will require well-organized internal logistics system and better intra-regional infrastructure. There is also potential to develop transit trade to/from neighboring countries. The three main trade corridors previously identified will evolve as a result of these changes and larger utilization of airfreight.

The share of bulk commodities (coal and oil products) will likely decrease relative to container traffic. Growth in agricultural production will contribute to exports in regional and overseas markets. The logistics demands of these markets will be greater and require better storage in production areas as well as in ports and airports. Trade with China is expected to grow and Vietnam’s ports will increase their role as gateways for Laos and Cambodia, as well as southern China. This requires improvements in transit regimes, border crossing facilities and customs procedures. The increasing proportion of high-value products in Vietnam exports will reinforce the relevance of air transportation.

Source: According to Vitranss 2.

**Policy 1: Develop Effective Transport Corridors in Support of Trade Competitiveness**

The three main economic corridors in Vietnam are the Hai-Phong port – Ha-Noi corridor, the Saigon port and Cai-Mep port–HCMC corridor and the North–South corridor linking Ha-Noi to HCMC. These can only function properly if supported by efficient and effective transport corridors. One of the reasons for the success of Malaysia has been an efficient transport corridor along the Klang Valley linked to an efficient port with the addition of road capacity through tolled highways when congested was noted. In HCMC, container port traffic will shift from Saigon River to Cai-Mep container terminals over the coming decade. This is a similar situation to Thailand with the introduction of Laem Chabang port which now handles more than five million TEUs relative to Bangkok’s one million. This transition was supported by development of new highways and the establishment of a large ICD in Lat Krabang with a rail link to the port. Similar transport infrastructure will be required if Cai-Mep is to be fully developed. In Hai-Phong, the capacity of the corridor to Ha-Noi needs to be increased to avoid congestion. An efficient railway service for cargo, even it is less than 100 km, should complement the road system and, to be effective, should be fully operated by the private sector. It is also expected that new barge services will be introduced between Cai-Mep port and both Saigon ports and Can-Tho. The latter would bring rice directly to Cai-Mep ports in Ba-Ria – Vung-Tau.
Privately operated and complete logistics centers should be built at Cai-Mep and Hai-Phong. Trade competitiveness would be improved by moving inventories of some exports to facilities located near the port. In addition, sufficient land should be made available around logistics centers for future processing facilities that could also benefit from FEZ status. The other main corridor, the North – South corridor, is expected to grow in importance as synergies develop between the two main growth poles. It is therefore necessary to have efficient road and rail services as soon as possible. Reasons for the delays in construction of expressways and the widening program should be investigated and an accelerated program of construction should be recommended.

Transport infrastructures exist or are in the process of being upgraded for the secondary transport corridors in Vietnam such as the GMS corridors connecting with China (Yunnan Province and Guangxi AR), Lao PDR and Cambodia. Infrastructure should be properly maintained as these corridors will experience increasing traffic as trade with ASEAN increases. Difficulties with increased clearance times at the border crossing points will have less to do with the quality of infrastructure and more to do with the procedures used.

Policy 2: Improve Transport and Logistics Services in Support of Trade Competitiveness

High transport and logistics costs faced by exporters are often mentioned as a serious problem. Trucking costs are high because the sector is poorly organized with too many small operators. The trucking sector would definitely benefit from reorganization, financial support to continue modernization of the fleet and the introduction of modern fleet management.

There are considerable opportunities to improve Vietnam’s rail services, especially for the movements of freight from port to cities and between the two growth centers. However, such development should be organized around a multimodal approach. The development of transport modes has previously occurred in isolation with little or no coordination with other modes or even with industrial and urban development.

The Inland Waterway Transport (IWT) will continue to serve as a cheaper alternative to road transport, especially in the Mekong Delta. Therefore maintaining and expanding water canals remains a priority.

Significant improvements in the logistics industry are expected in 2014, when global logistics operators are able to operate in Vietnam without constraints. Small operators now offering limited logistics services risk being greatly affected. Training programs for these small operators could smooth the transition. The creation of large logistics centers in Hai-Phong and Cai-Mep would provide broader, better and cheaper logistics services for the export sector.

The growth of air cargo offers an interesting alternative. Approximately, eight percent of total exports by value are shipped by air, often as late shipments when exporters miss their scheduled shipping dates. It is anticipated that there will be more goods that have a comparative advantage to be moved by air.

Policy 3: Mobilize Financial Resources Outside the State Budget to Invest in Improvements of Transport and Logistics Infrastructure and Services

It is estimated that Vietnam’s total investment in transport infrastructures and logistics is about 3.1 percent of GDP22 and that this will grow to 3.5 percent in the coming years. Most developed countries maintain a ratio of 2 to 2.5 percent, but in developing countries the rates are higher, typically 4 to 4.5 percent. The World Bank’s 2006 transport sector overview has suggested that developing countries should go up to seven percent to fill the infrastructure gap.23

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22 This is a MOT Vietnam estimate; other sources have mentioned a higher figure of 4.5 percent (ASR for Transport Sector, Vietnam, ADB 2011).
There is no doubt that Vietnam still suffers from a sizeable gap in transport infrastructure, both in terms of quantity and quality. At the same time, the cost of transport infrastructure has increased as illustrated by the rise in the cost of road construction per km. In this context the government budget is not sufficient to close the infrastructure gap sufficiently quickly. Other sources of financing are needed. The solution consists of attracting private sector funding. Large infrastructure projects are expensive and the best option is in the form of a Public-Private Partnership (PPP). To be successful, PPP projects need to be supported by a clear legal framework. This implies that conditions should be attractive to private investors. Among the key conditions are to: (i) establish a clear mechanism for land acquisition and dispute resolutions, (ii) resolve all land acquisition cases before private sector involvement, (iii) ensure transparency in the shared responsibility between government and private investor, (iv) develop a clear legal framework if a project is undertaken through a BOT or BOO system, (v) provide clear income generating formulas in the contract with either freedom for private sector to select the toll structure or compensation mechanism for traffic levels below targets, and (vi) provide government financial participation and/or government guarantees.

The regulatory framework for trade facilitation is discussed in Chapter 5, both in terms of existing capabilities and challenges, together with measures needed to remedy these so as to promote the contribution of trade facilitation to enhancing competitiveness.
CHAPTER 5

REGULATORY FRAMEWORK FOR CROSS BORDER TRADE

5.1 Introduction

The second pillar of trade facilitation is the regulatory framework. This chapter argues that this framework is important both domestically and for Vietnam’s economic relations in the region. Although progress has been made to streamline this framework to support trade facilitation in particular and trade in general, much more needs to be accomplished. While major attention to customs reform has produced some strengthening in border management, many agencies continue to rely on outmoded procedures that are time-consuming, opaque and susceptible to corruption. Business processes remain complex, inconsistent, and based on manual procedures with very little IT application. With trade growing rapidly, the setback these procedures cause to export competitiveness cannot be overemphasized. Several major areas of the framework pertaining to cross border trade are discussed below.

5.2 International Economic Integration and the Importance of a Regulatory Framework

Vietnam’s integration into the world trading system has progressed steadily over the past three decades. Trade liberalization started in earnest with Vietnam’s admittance into the Association of South East Asian Nations (ASEAN) in July 1995 and the ASEAN Free Trade Area (AFTA) in June 1996. This was further supported by a Bilateral Trade Agreement with the United States (US BTA) that went into effect in December 2001, and Vietnam’s accession to the World Trade Organization (WTO) January 2007. Since then, regional agreements have continued to proliferate, with ASEAN + China in 2002, ASEAN + 3,24 the Trans Pacific Partnership currently under negotiation, and most recently, ASEAN + 6 being announced.

24 April 1997, ASEAN proposed organization summit between ASEAN and Japan, South Korea and China. December 1997, the first summit was held in Kuala Lumpur. Then, in 2000, at the Fourth Summit held in Singapore, ASEAN+3 was formally institutionalized.
The impact of these agreements is not clear, and for the more recent agreements it is too early to gauge their impact. It is likely that Vietnam’s economy has been growing without their help. GDP has grown at over seven percent per annum during the past decade driven by strong annual export growth of almost 25 percent per year. However, maintaining this growth will present a formidable challenge under the pressure of increasingly intense regional and international competition in the sectors Vietnam has traditionally exploited. Maintaining this impressive level of growth will depend heavily on further integration into the global trading system and continued attention to improving private sector competitiveness.

Capturing the benefits of international integration will rely on an effective regulatory framework for cross border trade. Vietnam has made significant progress in this area particularly in the reform and modernization of customs systems and procedures but significant work remains to bring border management procedures and institutions up to global good practice standards. In addition to the General Department of Customs (GDC), a wide range of specific controls of import and export are managed by various government ministries and departments that are responsible for issuing various licenses and permits as well as undertaking inspection and testing procedures. These include but are not limited to the Ministry of Industry and Trade (MOIT), the Ministry of Agriculture and Rural Development (MARD), the Ministry of Culture, Sport and Tourism (MCST), the Ministry of Health (MOH), the Ministry of Information and Communication (MIC), the Ministry of Public Security (MOPS), and the State Bank of Vietnam (SBV).

Unlike GDC, where a great deal of attention has been paid to the main objectives of modernization such as automation of key business practices and the adoption of risk-based selective intervention approaches, many of the other ministries and agencies rely exclusively on time consuming and administratively resource-intensive paper-based forms and manual processing systems and are yet to embrace a more facilitative approach to managing compliance risk. In most cases these ministries and agencies still rely on a single transaction by transaction approach with little attention paid to compliance history and a high proportion of time consuming physical inspections to manage risk suggesting there is still a pressing institutional reform and modernization agenda to be pursued in Vietnam, particularly in the trade sensitive areas of sanitary and phytosanitary (SPS) and technical barriers to trade (TBT).

As a result, and despite recent efforts, border management in Vietnam is still considered slow, inconsistent, vulnerable to administrative corruption, and unresponsive to changes in business practices adopted by private sector traders. During the transitional period to market economy status, Vietnam’s state-controlled foreign trade has been progressively replaced by a vast number of small importing and exporting firms. This expansion has generated a considerable increase in the number of transactions processed by government agencies and an associated increase in the complexity of regulatory control. However, GDC and various other government agencies have largely maintained their former organization, responsibilities, and procedures, despite significant growth in the volumes of transactions processed. For example, the number of declarations processed per staff member in Vietnam Customs has seen a four-fold increase from approximately 100 in 2001, to almost 400 in 2008 (see Figure 5.1). Similar increases in the volumes of transactions processed have been recorded by other government agencies involved in regulating imports and exports, while the quantum of financial and staffing resources allocated to government agencies has remained relatively static.

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5.3 Customs Administration

A wide range of government agencies play a role in processing trade flows in and out of Vietnam. Among these, the GDC has prime responsibility for the control of all imported and exported goods and goods in transit to neighbouring countries. The GDC has received considerable attention from the government and has obtained a significant amount of financing and technical assistance support from the development community and this is reflected in major system and procedural improvements accomplished in the past decade.

Recent revisions in customs legislation have introduced a range of international standards and global good practice approaches to border management. Laws, regulations and guidelines are now published on the Customs website in both Vietnamese and English and attention has been paid to simplify, harmonize and rationalize procedures and to adopt automation wherever possible. The import and export requirements of the other government agencies are also posted on the Customs website, although it is currently difficult to navigate and the search capacity is limited. However, customs business processes remain complex and many are based fully or partially on manual procedures. Even when key processes have been automated, such as in the case of declaration processing, traders are often required to present paper documents in person to customs prior to goods being cleared and duties being paid thus not taking full advantage of the potential cost saving and administrative efficiencies available through automation.

Customs operations are regulated by Customs law and other related laws, such as the law on Import and Export Tax, VAT Law, and many other regulations, including decrees and circulars. The principle Customs law was promulgated in 2001, and significantly revised in 2005 and expected to be revised again in 2013. The original bill was control-oriented, weak in enforcement provisions, and inconsistent to some extent with the WTO rules. The revised law was designed to incorporate the trade facilitation-focused provisions of the World Customs Organization (WCO) Revised Kyoto Convention and relevant WTO rules, and now provides the legal framework necessary to allow officials to employ modern approaches such as risk management and post clearance audit, as well as supporting the implementation of various e-customs applications. The new legislation also codified the move to transaction value as the prime method for valuing imported goods and provides a better legal basis for post clearance audit.
Streamlining of administrative procedures was afforded a high priority in Customs' ongoing reform and modernization program. The key objective was to simplify procedures, reduce the reliance on paper documents, and increase certainty and transparency for all traders. The Customs reform agenda was reinforced by the Prime Minister’s Project No 30 on Public Administration Reform initiative under which a Taskforce was established to review and streamline procedures in Customs administration. As a part of this process, GDC compiled a set of 239 government administrative procedures that affect Customs services of which 127 procedures were selected as a high priority for detailed review and revision while 71 needed simplification. Within the MOF, GDC proposed to amend 15 legal documents among the 21 relevant to customs and to simplify 115-135 procedures. In the second stage of this Project, GDC identified 136/168 procedures that need to be simplified, of which GDC proposed to amend 127, to replace 8 and eliminate 3. In addition, a series of major organizational reforms are also under way inside GDC that, once finalized, will provide a more streamlined and rational framework for national Customs administration. This procedural simplification is marginal, however, compared to business process re-engineering required under a targeted Customs modernization.

The time taken to clear goods is generally accepted as one of the most important indicators of Customs and border management performance. Other indicators include the time and cost incurred by traders to meet regulatory requirements imposed both by Customs and other agencies. Some of these are not directly related to the arrival and clearance of the goods, e.g. the time and costs associated with obtaining relevant import licenses. Ultimately, such data will be readily available through the Vietnam Customs Information System (VCIS) and the proposed National Single Window system but presently are unavailable. In 2004 the World Bank carried out a survey which included overall processing times (including Customs clearance times) at three land border check points, two seaports and an Inland Container Depot (ICD) (see Table 5.1). The statistics, including those for individual sites, indicate a high rate of inspections, with almost no infringements detected. Interestingly, Customs delays as a percentage of total processing time ranged from 12 to 95 percent depending on the individual site. The average is 27 percent for ports and 89 percent for land border crossings, indicating that non-customs agencies play a significant role in clearance delays.

<table>
<thead>
<tr>
<th></th>
<th>Land Borders</th>
<th>Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall time</td>
<td>2:23 hours</td>
<td>8.4 days</td>
</tr>
<tr>
<td>Customs clearance time</td>
<td>2 hours (17 minutes for examination)</td>
<td>2.3 days (37 minutes for examination)</td>
</tr>
<tr>
<td>Examinations</td>
<td>92 percent (practically no detection)</td>
<td>94 percent (practically no detection)</td>
</tr>
</tbody>
</table>

More recent data on Customs performance was prepared as part of the Results Framework from the monitoring and evaluation system established as part of the World Bank's Vietnam Customs Modernization Project (2004-2011). A series of indicators and targets were established to measure progress during project execution. These indicators covered a broad range of activities and were designed to measure efficiency and effectiveness and cover Customs' fiscal as well as trade facilitation performance. As can be seen from Table 5.2, Customs substantially improved its performance against each of the Project performance indicators suggesting the Government's reform agenda had delivered major improvements in Customs' performance and that these improvements were being translated into sound benefits for the trading community.

Moreover, a Project Completion Report prepared by the World Bank in early 2012 cited a range of positive developments as evidence of progress in the GDC’s reform and modernization program. While the report acknowledged that not all the positive developments were attributable solely to the World Bank project it noted significant progress in the following areas:

- The adoption of many international standards and good practice approaches to customs administration;
- The adoption of a strong strategic planning framework and ongoing priority afforded to reform and modernization of key business systems and procedures (outlined in the Ministry of Finance's 2011-2015 Plan for Customs Reform and Modernization);
- Greater understanding of modern practices such as selective intervention, risk management, intelligence, post clearance audit and compliance management;
- The development and implementation of a performance management framework;
- The development and implementation of a training master plan and HRD framework;
- Assistance in designing and establishing key organizational units necessary to support modern “value added” functions;
- The establishment of a Reform and Modernization Directorate and the deployment of eighty officials to better coordinate reform activities and ensure coherence in the inputs of development partners; and
- Completion of a comprehensive Business Process Reengineering (BPR) exercise that reviewed, developed and gained agreement for significant improvements in all core customs operational and support activities.
Table 5.2: Customs Performance Indicators

<table>
<thead>
<tr>
<th>PAD Outcome Indicators</th>
<th>2006 Base-line (April)</th>
<th>2007 (Dec)</th>
<th>2008 (Dec)</th>
<th>2009 (Dec)</th>
<th>2010 (July)</th>
<th>Change 2006-2010</th>
<th>End of Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client perception GDC performance</td>
<td>33.9%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>53.5%</td>
<td>57.8% increased</td>
<td>Significant improvement</td>
</tr>
<tr>
<td>Revenue collection cost/revenue collected</td>
<td>1.11%</td>
<td>0.96%</td>
<td>0.76%</td>
<td>0.87%</td>
<td>NA</td>
<td>22% decrease</td>
<td>20% decrease</td>
</tr>
<tr>
<td>Declarations per number of staff</td>
<td>271</td>
<td>324</td>
<td>360</td>
<td>365</td>
<td>NA</td>
<td>35% increase</td>
<td>25% increase</td>
</tr>
<tr>
<td>Mean import clearance times for commercial shipments at ports, roads and airports</td>
<td>At airports NA</td>
<td>NA</td>
<td>NA</td>
<td>At airports NA</td>
<td>NA</td>
<td>45% reduction at airports</td>
<td>25% reduction at ports</td>
</tr>
<tr>
<td></td>
<td>At ports: 8.41 days overall processing time; 56:55 hrs customs clearance time</td>
<td>NA</td>
<td>NA</td>
<td>At ports: 7.78 days overall processing time; of which 14:16 hrs customs clearance time</td>
<td>NA</td>
<td>25% reduction at ports</td>
<td></td>
</tr>
<tr>
<td></td>
<td>At roads: 5:09 hrs overall processing time; 2:42 hrs customs clearance time</td>
<td>NA</td>
<td>NA</td>
<td>At roads: 7:09 hrs overall processing time, of which 1:50 hrs customs clearance time</td>
<td>NA</td>
<td>25% reduction at roads</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of consignments subjected to phys. Inspections</td>
<td>94% at ports</td>
<td>NA</td>
<td>NA</td>
<td>51% at ports</td>
<td>46% reduction at ports</td>
<td>At least 50% reduction</td>
</tr>
<tr>
<td></td>
<td>58% at roads*</td>
<td></td>
<td></td>
<td>13% at roads*</td>
<td>78% reduction at roads*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revenue generated and/or infringements detected as result of Customs’ intervention pre or post clearance audit (PCA) (VND billion)</td>
<td></td>
<td></td>
<td>46% reduction at ports</td>
<td>78% reduction at roads*</td>
<td></td>
<td>50% increase</td>
</tr>
<tr>
<td>From PCA</td>
<td>117.1</td>
<td>191.8</td>
<td>212.3</td>
<td>344.6</td>
<td>NA</td>
<td>194% increase</td>
<td></td>
</tr>
<tr>
<td>From customs valuation</td>
<td>154</td>
<td>NA</td>
<td>NA</td>
<td>486</td>
<td>NA</td>
<td>216% increase</td>
<td></td>
</tr>
</tbody>
</table>


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26 Project Appraisal Document, World Bank-funded Customs Modernization Project.
Despite such improvements, Vietnam still lags far behind its regional peers in terms of border clearing times and physical inspection rates. Figure 5.2 shows scores given under the World Bank’s Logistics Performance Index (LPI) 2007, 2010, 2012 for selected regional peer countries. Vietnam has performed better than Indonesia and the Philippines, but fallen behind Malaysia, Thailand, and China. Of concern, however, is the decline in its performance over the past five years.

**Figure 5.2: Customs Performance, Selected Countries and Selected Years**

![Bar chart comparing customs performance in Vietnam, Thailand, China, Philippines, Indonesia, and Malaysia from 2007 to 2012.](chart.png)


Similarly, clearance times in Vietnam are among the highest in the region, surpassing those in China, Malaysia and Thailand as shown in Figure 5.3. Physical inspection rates are also remarkably high (over 40 percent) in comparison with other countries in the region. These data indicates that while improvements have certainly been made and many new approaches adopted, key competitors in the region have also reformed and modernized their operations suggesting the reform agenda needs to be broadened and accelerated simply to keep up with regional competitors. Any loss of reform momentum could therefore have a significant negative impact on national competitiveness.
In terms of private sector perceptions of Customs performance, the World Bank and the State Inspectorate undertook a survey of clients in 2006 and repeated in 2012 that flagged a number of issues. According to the survey, the users felt that procedures were neither clear nor evenly applied and that brokerage firms were frequently unaware of the customs modernization program. In addition, users indicated that regulations are often unclear, that Customs staff are inefficient and not qualified, and that procedures were still complex, lengthy and costly.

Other sources of data also indicate areas where attention needs to be paid to improve Customs performance. The surveys conducted by the State Inspectorate and the World Bank in 2005 and repeated in 2012 revealed that Vietnam Customs was among the top three agencies in terms of exposure to widespread corruption. According to this survey, three out of five agencies that were regarded as more prone to corrupt practices (Customs, Transport, and the Traffic Police) were directly involved with trade logistics and facilitation (see Table 5.4).
5.4 Adoption of Modern Approaches to Customs Administration

Notwithstanding the issues identified above, the GDC has made progress in its efforts to support Vietnam’s transition to a market economy. Customs modernization has been gradual and undertaken through the government’s various guidance and directions since 2004. In 2011, the Prime Minister approved the Strategy of Customs Developments to 2020 and the Plan of Reform and Modernization of Customs 2011–2015. These instruments provide a wide range of guidelines for a legal base and to ensure that various resources for customs modernization are forthcoming. As a result, a revised customs law is expected to come into force in 2014. The changes focus on an improved legal framework for administrative reform, customs modernization, and e-customs. It will provide additional facilitation for trade while maintaining the management requirements for adaptation of international customs standards.

One particularly noteworthy example of progress is the effort to apply a robust risk management regime. The GDC has been applying risk management-based procedures for commercial imports and exports since 2006 and has progressively improved the supporting legal framework. The latest regulations and procedures were completed in July 2009. A key legislative document was MOF’s Decision 48/2008/QD-BTC (July 2008) which provided a regulatory framework for applying risk-based methodology in the short-term. Since 2011, an organizational structure for risk management has been applied in all areas of customs operation with 11 agencies to coordinate exchange of risk-based information. Currently, Vietnam Customs uses risk-based selectivity criteria together with x-ray scanner inspections.

Risk management is organized at three levels in Customs: headquarters, provincial departments, and customs sub-departments. The Headquarters’ Risk Management Unit has a staff of 15 people and provides the legal and procedural framework for risk management. It develops countrywide risk profiles and assessment criteria, manages and operates the automated selectivity system and is responsible for international cooperation and information sharing on risk management. The unit is also responsible for researching and developing risk management techniques and designing functions within the risk management system. At the regional level, the Risk Management Division employs 200 staff to collect information and develop regional-level risk management profiles. At the sub-department level, Customs has about 300 staff in risk management teams responsible for gathering and analyzing risk information, setting up risk profiles, conducting examinations based on these profiles, and providing feedback for further analysis.

Despite the significant progress, the GDC faces difficulties and constraints in the application and implementation of risk management. The resources to assess and manage risk, as well as the level of experience of the assigned staff, are limited, pointing to significant unmet development needs in training and capacity building. These will need to be addressed if the GDC wishes to expand risk management operations beyond declaration processing and selective physical inspections, linking it to other compliance and control processes. It will need to invest further in its commercial intelligence capacity and post clearance audit capabilities. These requirements have been acknowledged by the government and reflected in the 2011 decision to establish a new Customs Academy to supplement the training currently provided via the Ministry of Finance Training facility in HCMC and its Ha-Noi annex.

Post clearance audits (PCA) have been introduced as part of the risk-based control and trade facilitation. The provisions in Customs law for PCAs specify the appropriate methods for examination, collection and management of tax in the context of WTO commitments. The audits conducted so far have had a positive outcome. In 2003, only 25 companies were audited and VND 19 billion recovered whereas in 2011-2016
companies were inspected and VND 512.5 billion recovered. In 2012, the amount recovered up to mid-November was VND 1,176 billion. The success of these audits provides vital support for the operationalization of customs modernization targets.

A key element of modern customs administration is the development of a partnership with the private sector. In this area, the GDC has made substantial progress in recent years including coordination with traders through the Vietnam Chambers of Commerce and Industry (VCCI) and its associations and Memorandums of Understanding between customs and relevant companies such as carriers, forwarders, postal services, customs brokers, etc. This form of activity is considered relevant to the approach of the Authorized Economic Operator (AEO) mechanism which has been implemented at the pilot stage with 12 companies.

Many private sector traders employ customs brokers to act as intermediaries in dealings with Customs and significant attention has been paid to strengthening the licensing and competency requirements for these brokers. Currently, these legal documents are used as a basis for the brokerage and there has been encouraging achievement in enhancing the effectiveness of traders to deal smoothly with customs declaration and procedures. The next step is to consider is the establishment of Vietnam Association of Customs Brokers to improve the capacity of this service.

The GDC now convenes two national meetings per year with key private sector organizations (such as the VCCI) and large stakeholders. These are complemented by a range of similar meetings convened at the regional and local level. The meetings are designed to provide an open forum for issues of mutual interest and future changes in regulations are discussed. Where major policy changes are planned these are discussed and opportunities provided for feedback and consultation prior to promulgation and implementation. In addition, training forums are provided to inform traders when new regulations or procedures are launched. Furthermore, GDC issued the decision 225/QD-TCHQ in 2011 on the “Client’s Service Charter” which sets out customs commitments to ensuring the best facilitation for trade.

Customs performance index is a tool to measure the effectiveness of customs performance as specified in the Strategy of Customs Developments until 2020 and is one of the five key tasks of customs modernization in the Plan of Reform, and Modernization of Customs for 2011-2015. A comprehensive and independent survey on the perception of Customs clients and staff toward its services was conducted as part of the World Bank-funded Customs Modernization Project. The survey provided useful information on client perception of GDC performance for the project’s baseline monitoring, as well as for customs management purpose in general. Such a survey should be regularly conducted and reported within a relevant group of stakeholders. Technical assistance has been provided within the framework of the Customs Modernization Project to enhance the customs’ staff capacity in developing and monitoring a relevant set of customs performance indicators. Recently, a guiding regulation on a set of customs performance index has been issued.

One of the key concerns of traders in Vietnam is the lack of transparent and readily available information on import, export and transit requirements. The GDC has taken these concerns seriously and has invested in developing a website (as discussed above) but this does not constitute a trade information portal (required for Vietnam to meet its 2015 obligation to participate in the ASEAN Trade Repository initiative). Although the development of this portal will not necessarily be the responsibility of the GDC as many other government agencies are involved in regulating trade, Customs will need to play a strong role in its development. Also it will likely be developed in parallel with the proposed National Single Window program.

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28 This service has been specified by a series of decrees and circulars as Decree 101/2001, Decree 79/2005; the latest is Decree 14/2011.
29 This regulation was issued by Decision No 1314/ QD-TCHQ in mid-2011.
Information Technology

Although IT systems have been used to support declaration processing in Customs since the late 1990s and have been progressively updated by local officials and contractors, they do not offer the range of functionality necessary to adequately support the adoption of modern approaches to Customs administration. The Automated System for Customs Data (ASYCUDA) was installed by UNCTAD between 1993 and 1996, but was never used to its full capacity, due largely to the lack of legislative basis for its operation and a lack of willingness to adopt the Single Administrative Document. However, this first pilot did allow the GDC to familiarize itself with computerized declaration processing systems. Several of the modules, including various reference tables and trade statistics, remain in use today.

While the GDC has developed its own automated systems to support its key operational requirements, it recognized that it would need to upgrade its systems and related infrastructure to support a long-term modernization program. Therefore, automation was one of the priority areas included in the World Bank’s Vietnam Customs Modernization Project. Although the World Bank project was recently cancelled it had already financed the completion of a major business process reengineering (BPR) exercise and provided detailed bidding documents for a new and comprehensive Vietnam Customs Information System (VCIS) that will support the redesigned customs processes, the collection of data for management, planning and statistics purposes, and improved connectivity with the private sector and regional customs authorities.

Parallel initiatives to increase the usage of IT in border management have had initial, but limited results. Under the government-funded IT development plan, the GDC implemented a pilot electronic import and export declaration system that started in 2005 in Hai-Phong and HCMC and was later extended through 2008. The results were limited in terms of the number of traders involved and the degree of functionality provided because the traders were still required to lodge hardcopies of documents prior to processing. However, it did provide valuable experience for customs and some benefits to pilot participants, including reduced need to submit paper-based documents, quick notification of the processing channel selected and fewer physical and documentary inspection (although the latter was in part achieved by only highly compliant traders being selected for the pilot program).

According to participants involved in the pilot, the system, once fully operational, will yield substantial savings in time and cost. Despite the fact that the pilot system is not currently available for transit operations, pilot users (customs brokers, forwarders, and logistics operators) appreciated the opportunity to prepare the necessary import or export forms at their premises and the system’s capability to check entries and identify errors. The system allowed Customs to assign the channel, i.e. green, yellow or red, and inform brokers immediately of this assignment. The system is said to be user-friendly and intuitive, requiring no more than 30 minutes of training to use. The only cost to the broker is a one-time fee of approximately US$50 for the initial installation. This can be done on single or multiple computers operating under the same e-customs account. One of the companies interviewed quoted substantial savings, e.g., cutting port clearance time from 2-3 days down to one day. Pilot participants were generally satisfied with the pilot system and recommended its expansion to a wider set of users and the addition of new and expanded functionality.

As noted, the BPR exercise conducted as a part of the World Bank project established a clear blueprint for further rationalization and simplification of customs business practices in line with international standards and global good practice. The project also financed the development of functional and technical specifications for the next generation Customs ICT system. It is understood that a government decision has now been taken to obtain a replacement ICT system based on the system developed and currently deployed by Japan Customs.30 The BPR and specifications prepared as part of the World Bank project will help Customs adapt the Japanese system to the local requirements and operating environment. Every effort should be

30 Nippon Automated Cargo and Port Consolidated System (NACCS).
made to build on the experiences learnt during the e-customs pilot program and ensure sufficient resources are devoted to user training. Moreover, additional attention is needed to ensure full interoperability between the new system with corporate support systems such as those already developed to support intelligence, risk management and post clearance audit.

5.5 ASEAN and National Single Window

In 2005 the Government of Vietnam signed an agreement to participate in the ASEAN Single Window initiative, according to which, a National Single Window (NSW) should have been established by 2012. In fact, this target was not achieved. In 2008, an ASW Steering Committee was established under Prime Minister’s Decision (1263/QD-TTg-September 2008). This Committee, which was active through 2012, was chaired initially by the Minister of Finance and currently by the Deputy Prime Minister, with support from a number of Expert Groups. The GDC was identified as the lead government agency to facilitate implementation of the NSW and to coordinate Vietnam’s participation in the wider ASW initiative. In 2011, the Prime Minister issued decision No 48/2011/QD-TTg for the pilot implementation of NSW.

The ASW Committee, consisting of representatives from various government agencies, has developed and obtained agreement for a NSW Master Plan. It is now working on the technical and functional specifications as well as legal requirements. Some 14 government agencies are participating in the steering committee and related working groups. They are conducting the necessary background work on legal and operational issues associated with design and implementation of an effective NSW. The Master Plan envisages three distinct phases of preparatory work for the period up to 2015 when the NSW is expected to be fully operational. Work is currently progressing with the support of development partners, including the World Bank and USAID with prior support from the EC. Currently, a comprehensive gap analysis is being conducted of the legal framework and the system’s integration and/or interoperability with the GDC’s ICT systems for import, export and transit declarations. Key activities include the standardization and harmonization of data requirements across all agencies and the supporting procedural steps for seamless lodgment of required information as well as processing and payment of duties, taxes and charges. This work will draw heavily on the BPR exercise during which many of the key processes were developed, tested and ultimately agreed to.

While the government’s decision to establish the ASW Steering Committee and appoint GDC as the lead agency were positive first steps and despite initial progress with the development of the Master Plan, progress on the NSW and ASW has been hampered by a lack of dedicated resources, both human and financial, as well as the uncertainty regarding the future VCIS (customs system). Although this uncertainty has been reduced following the government’s decision to source the Japanese customs system, the implementation of a fully operational national customs system is a major undertaking and is likely to require significant time and additional GDC personnel to augment the organization’s small number of ICT competent staff. In the short-term, this will have a negative impact on N/ASW system design and implementation.

Key stakeholders will need to adopt a pragmatic and patient approach and set realistic expectations. Many stakeholders from the public sector (Port Authority, Health Ministry, Agriculture Ministry, Economic Police, Market Management etc.), and the private sector (carriers, brokers, freight forwarders, bonded warehouse operators, etc.) will need to participate in this process, which should begin immediately and progress in parallel with VCIS implementation. A recommended starting point is a full mapping of key business processes with appropriate attention to carefully designed study tours in other countries that have already

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31 The NSW is an electronic facility that allows traders to lodge standardized information and documents via a single entry point to fulfill all regulatory requirements associated with import, export and transit.
made progress on their N/ASW commitments, including the Philippines and Indonesia. As the other agencies generally lack the risk management and compliance improvement capacities that the GDC has developed in recent years, it would be prudent to begin by strengthening capabilities in these areas among participating government organizations.

### 5.6 The Role of other Border Management Agencies

As discussed, a large number of agencies other than the GDC play a significant role in regulating the import, export and transit of goods in Vietnam. These include, but are not limited to, the Ministry of Trade, the Ministry of Agriculture and Rural Development, the Ministry of Culture and Information, the Ministry of Health, the Ministry of Industry and Trade, the Ministry of Internal Security, and the State Bank of Vietnam.

An increasingly important factor determining the ability of developing countries to compete in overseas markets is the ability of their exporters to meet the standards and technical requirements of their buyers. These requirements include a range of government standards for health and safety enforced by the importing countries. This requires a system for conformity assessment, which includes inspection, testing, verification, and certification. The increasing variety and complexity of standards ensure the quality of traded goods, but also introduce significant costs related to conformity assessment. The standards can create barriers to trade if there is a lack of transparency and if the procedures are applied in a discriminatory manner. The WTO agreements on Technical Barriers to Trade (the TBT agreement) and on Sanitary and Phytosanitary measures (the SPS agreement) are critical guides in this area. However, to implement these instruments successfully requires coordination among relevant agencies.

While the government and development partners have given considerable attention to Vietnam’s SPS and TBT regimes, the focus has been on strengthening controls and institutional capacities without sufficiently addressing the administrative burden associated with meeting particular requirements. Although legitimate national objectives should not be compromised, there are a number of ways in which compliance can be improved while at the same time reducing transaction costs and administrative delays. For example, efforts to improve risk management systems and analyze compliance records can provide incentives for compliance. At the same time, the cost of enforcement is reduced through selective inspections, permits and licenses that apply to specific periods of time rather than specific shipments and sound sampling techniques rather than blanket testing, which is both costly and time consuming.

While the government’s regime to control the quality of fish products has received much attention and has been regarded as a model for others to follow in Vietnam, there is little doubt that strict laboratory testing adds significant cost to the export of seafood products (already facing strong competition from Thailand among others) and results in delays in packing and shipping. Moreover, very strict product standards are already imposed by the receiving countries and buyers provide additional incentives for self-policing of product quality. Therefore, there is a need to increase the awareness of Vietnamese producers and exporters of the standards and requirements of importers.

It is also clear from interviews conducted as part of the recent World Bank study that most non-customs agencies have not yet automated key permit and licensing processes and still require time consuming and costly manual processes for the lodgment, processing and issue of required permits. This suggests the same level of government attention given to the reform and modernization of Customs in order to ensure it can effectively balance its functions of control and revenue collection with the need to facilitate trade should also be applied to other government ministries and individual agencies involved in the regulation of trade. A useful starting point would be exports where the role of Customs is already reasonably limited and where meeting regulatory controls can have a significant impact on national competitiveness, particularly in areas where trade costs are particularly sensitive.
As globalization develops, more regional arrangements and FTAs provide trade incentives to specific partners. From an administration view, this creates confusion with regards to Certificates of Origin (C/O) and increases opportunities for fraud based on country of origin. To limit fraud requires cooperation between the agencies issuing the C/O, and the customs authorities accepting and verifying the C/Os. An example of cooperation between the relevant agencies in the import and export countries is the recent initiative for self-certification of origin. This needs more effort and coordination among the border agencies in meeting the balance of the challenge between control and facilitation in the field of border management.

Implementing intellectual property rights (IPR) under WTO requires the same determination from government and its relevant agencies. IPR violations, including counterfeit goods and trans-shipment frauds, pose serious threats to domestic production and exports and to the health and safety of the populace. The border management agencies are in the best position to deal with this issue. They need to coordinate with their counterparts in other countries and establish a joint database of goods subject to IPR violations so they can apply risk management techniques to control violations. This approach has been formalized in a program launched by the World Customs Organization named Standards Employed by Customs for Uniform Rights Enforcement (SECURE).

### 5.7 Summary

This broad review has detailed the challenges in ensuring an effective regulatory framework for cross-border trade. These have arisen because the growing volume of trade has not been matched by a commensurate increase in resources, human or otherwise, devoted to border management. The resulting long delays have made corruption worse -- already widespread from other factors like lack of transparency and information about procedures. This situation was exacerbated by an ICT system that was unable to cope with the processes of international standards. Yet a modern and fully automated customs system will be vital for the effective implementation of the National Single Window and the ASEAN Single Window to which Vietnam is committed. Development of such a system requires not only inter-agency coordination, but also involvement of all stakeholders. The importance of coordination emphasizes that customs is not the only instrumental agency. For example, all border management agencies play a vital role in enforcement of IPR.

An effective regulatory framework cannot exist without equally robust supporting institutions. While agencies are part of the regulatory framework the institutional framework also encompasses the policies that the relevant agencies implement. This institutional framework is discussed in Chapter 7.
Weaknesses in Vietnam’s supply chains for manufactures and agricultural products have prevented the country from lowering export costs in capturing much needed value added. Key constraints facing the former include heavily passive dependence on imported materials that negatively affect ability to reduce lead-time and meet flexibility of global markets change, and weak capacity for sourcing materials. The latter faces regulatory constraints for large-scale agro-industrial development. In particular, the dominance of government-to-government (G2G) rice export discourages production of high quality and differentiated rice. Development of supporting industries, although a longer-term endeavor, can help relieve many of the above constraints. Yet little attention has been paid to restructuring them or developing clusters and supporting industries to reduce cost and capture more value added.

6.1 Supply Chains and Trade Competitiveness: The Role of Government

As part of an assessment of trade competitiveness, an evaluation was made of the performance of the supply chains for major agricultural and manufacturing exports. The general conclusion was that while the efficiency and effectiveness of the domestic logistics services did have an impact on competitiveness a more significant impact comes from the structure of the supply chains. Furthermore, the principal impact was not on the current trade but on the development of future trade. This development includes improvements in product value, increases in value addition, and diversification of both products and markets.

The responsibility for restructuring the supply chains lies primarily with the private sector. However, the public sector plays an essential role in creating an environment that both facilitates and encourages this transition. A number of public sector initiatives were mentioned in discussions with exporters. These were evaluated as to their potential contribution to the restructuring of supply chains. They were then divided into three groups according to their impact on development of future trade.

In the first, improvement in product quality, the government has a significant role with regards to agricultural exports. The principal objective is to improve the linkages between suppliers, processors and markets. In
rice exports, this implies a reduction in the role of SOEs and, in particular, G2G sales, because they encourage production of relatively low-quality, undifferentiated rice. In seafood, this requires more effective regulation of health and sanitary conditions from the fish farms to the markets. For coffee, it involves developing and enforcing quality standards and brand identity. The government also has a role in supporting research directed at improving product quality for both agricultural and manufacturing outputs.

In the second, value addition, government policy can be used to facilitate the involvement of domestic enterprises in upstream and downstream activities, either directly or through subcontracting. In agriculture this implies greater use of contract farming as well as preparation of exports that are shipped direct to retail outlets. In manufacturing this implies improving the quality of locally produced inputs and producing products for specific markets. These changes increase the period over which enterprise is exposed in terms of cash flow and price fluctuations, and therefore government support is needed to ensure the availability of working capital for that longer period, provide mechanisms for hedging against price volatility, and enforce commercial contracts between these enterprises, their suppliers and the buyers of their products. Government can also contribute through development of clusters that not only increase the scale of production, but also encourage greater use of domestic suppliers.

In the third, diversification of products and markets, the government’s role is already well defined. It includes funding general research and training related to product development, negotiating trade agreements to open new markets and improve access to existing markets, and supporting programs for trade promotion.

### 6.2 Agricultural Supply Chains

Vietnam has achieved several milestones in its agricultural exports, including becoming the largest exporter of Robusta coffee and catfish and the second largest exporter of rice, globally. However, after more than a decade of rapid growth, it is expected that this growth will slow due to limitations on both land and labor. As a result, future increases in the value of agricultural trade will depend on increases in the unit value of the exports as well as the volume. The latter requires higher yields from production, post-harvest processing and industrial processing. The former requires better selection of varieties, better sorting of harvest crops and better quality control from farm to final sales. It also requires a transition for spot market sales of single large orders to contracted delivery of multiple shipments over a fixed period. An increase in both unit value and volume will require more contract farming and the formation of farmers groups and larger farms. This applies to both agriculture and aquaculture.

#### 6.2.1 Coffee

Vietnam’s coffee production increased at an average rate of 16.5 percent over the last 15 years (Figure 6.1: Part A) reaching about 1.15 million tons in 2011. Its share of global trade rose to 14.3 percent but most of its exports were Robusta where it has a market share slightly less than 40 percent. Nearly all of the exports were green beans, most of which were dry-processed and of relatively low grade. Only about five percent were exported as roasted beans or instant coffee. Exports were shipped to more than 70 countries and territories, but the leading importers are the EU and North America as well as Japan and Korea (Figure 6.1: Part B). Figure 6.1: Part C shows the difference between unit prices of green bean Robusta and Arabica.
Despite the increase in production, there has been a decline in yields and quality due to poor agricultural practices and post-harvest processing. A particular problem is the proportion of coffee plants that have exceeded their productive life. Contributing to problems with quality is the fragmentation of the inbound supply chain, which limits coordination between mills and farms. Another related problem is the lack of working capital, which limits the scale of the collection activity and the potential integration from the mill to the farm.

Figure 6.2 shows a typical coffee supply chain. Coffee is grown primarily on small-to-medium sized farms of two to five hectares. Nearly all of these farms dry the cherries in the sun and pulp them to produce parchment. Collectors purchase the parchment at the farm-gate and sell it to buying agents, who transport it to the mill. There are also some larger farms that sell both cherries and parchment to the mills directly. The mills produce green beans primarily through dry processing and store them in warehouses for eventual sale either directly to international traders or indirectly through domestic traders in Daklak and Ho Chi Minh. There are about 100 mills with production capacities of 5-60 thousand tons per year. The majority of orders are received in the months following harvest in October-January, but orders are placed throughout the year. Individual orders are typically for 40-100 tons and the time from confirming an order to delivery to the loading port can be less than one week.

Source: UN Comtrade.
The international traders arrange for ocean transport and sell to larger roasters who prepare the beans for sale to various retail outlets. Vietnam has a few integrated food companies that process the green beans to produce instant coffee, which is then sold in the domestic market and exported to the region. The principal financial challenge for the mills is to maintain sufficient inventory to fulfill orders and have sufficient working capital to cover the cash-to-cash cycle, which is typically 30-60 days. The beans are stored in a warehouse in 60 kg bags until an order is received and then transported to the gateway port for transport overseas in containers. The typical distance from the mill to the gateway port is 400-700 km. The warehouse is located either close to the mill or near the gateway port.

The supply chains for coffee exports are relatively efficient as indicated in the time required for each stage (Table 6.1). The cost for domestic transport, including handling in the port, accounts for less than five percent of the FOB value. The delivery time could be decreased by reducing the time required for procurement and fumigation, but the savings would be small compared to the total time from sale at the farm-gate to unloading at the destination port and have little value given the long shelf life of coffee beans. The linkage between the farmers and the market can be improved by transferring responsibility for farm-gate collection from collectors to farmers groups. This would require more direct involvement of the mill in organizing collection of the parchment. The most important benefits produced by restructuring the supply chain would be the increase in the quality of beans that are exported as well as the portion of the beans that receive additional processing (see boxes in Figure 6.3).

**Figure 6.2: Coffee Supply Chain**

**Figure 6.3: Restructured Coffee Supply Chain**

Source: TTFA Survey and Authors.
By substituting spot purchases between farmers and collectors with contracts between the mills and farmer groups, the mills could provide incentives to the farmers to increase replanting of coffee plants and switching to Arabica, which commands a premium over Robusta (Figure 6.1: Part C), in the higher elevations. The transfer of responsibility for post-harvest processing to the farmers groups would allow investment in better equipment for sorting and processing the beans which would improve the quality of parchment delivered for dry processing. It would also allow for more efficient delivery to the mill of Arabica cherries for wet processing.

Improvements to the outbound supply chain from the mill would allow (i) differentiation of green beans not only by grade but also source; (ii) introduction of multiple channels for distribution of branded products; (iii) improved inventory management to support sales through supply contracts rather than individual orders; and (iv) a greater proportion of beans processed locally into instant coffee and other products for domestic consumption and export to the surrounding countries.

These changes require financing for investment in capital equipment and for replanting as well as working capital to allow mills to extend their cash-to-cash cycle to include purchases at the farm-gate and to maintain inventories for servicing supply contracts. Since they introduce additional risks for the farmers and mills, greater transparency in transactions between participants in the supply chains is required to reduce counter-party risk.

### 6.2.2 Rice

Vietnam has experienced sustained growth in its exports of rice averaging 7.8 percent over the last two decades (Figure 6.4). In 2011, 7.1 million tons worth US$3.5 billion were exported. The rice is shipped throughout the world but the majority remains within Asia (Figure 6.5: Part A). A large portion of the exports is sold under G2G contracts.

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<td>7-28¹</td>
<td>5-28¹</td>
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<td>Payment²</td>
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Notes: ¹Storage of green beans for export 7-14 days, additional time for roasting, blending, processing varies with product and market; ²After loading on the vessel.

Source: TTFA Survey and Authors.
The average FOB\textsuperscript{32} value of rice has fluctuated but has recently risen to the US$400-$550 range due to both increasing international prices and improvements in the quality of the rice. Nevertheless, most of the exports remain white rice, much of which is 15-25 percent broken (Figure 6.5: Part B) with the value determined based on the percentage broken. However, some trade is developing in parboiled and aromatic brands. An example of the premium obtained by developing branded varieties is shown in Table 6.2. The trade in higher value rice is only beginning and there are many challenges not only in producing and processing good quality rice but also in the marketing, presentation and distribution of these products.

\textbf{Figure 6.4: Rice Export Volume and Value}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{rice-export-volume-value.png}
\caption{Rice Export Volume and Value}
\end{figure}

\textit{Source: Vietnam Food Association.}

\textbf{Figure 6.5: Rice Export by Destination and Type}

\begin{figure}[h]
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\includegraphics[width=\textwidth]{rice-export-destination.png}
\caption{Rice Export by Destination}
\end{subfigure}\hfill
\begin{subfigure}{0.49\textwidth}
\centering
\includegraphics[width=\textwidth]{rice-export-type.png}
\caption{Rice Export by Type}
\end{subfigure}
\caption{Rice Export by Destination and Type}
\end{figure}

\textit{Source: Slayton and Associates.}

\textit{Source: Vietnam Food Association, 2010.}

\textsuperscript{32} FOB is an abbreviation of the term “Free on Board” meaning, according to Incoterms 2000, that the seller delivers when the goods pass the ship’s rail at the named port of shipment. This means that the buyer has to bear all costs and risks of loss of or damage to the goods from that point. The FOB term requires the seller to clear the goods for export.
Despite the large volumes shipped, the rice trade remains a small-scale activity involving a large number of small farmers, collectors, mills and exporters. There are three categories of suppliers of padi (unmilled rice). The majority of padi is supplied from small farms. Farmers sell the padi to collectors who transport it by barge to the medium-sized mills (three to five tons per hour) located near to the farms. The mills remove the husk and store the rough rice prior to selling it to the buying agents of the large mills where the rice is polished before being exported. The larger farms and members of farmer groups sell direct to the buying agents of the larger mills (20–50 tons per hour) where the padi is dried, milled and then exported. Some of the large farms grow aromatics or other special varieties which they have milled but retain responsibility for exporting. The time from harvest to loading for export is shown in Figure 6.5 because each requires that the rice be stored and aggregated at some point along the supply chain.

Table 6.2: Thai Rice Prices August 29, 2012 (US$/MT)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Thai White</th>
<th>Glutinous</th>
<th>Parboiled</th>
<th>Thai Hom Mali</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$640</td>
<td></td>
<td></td>
<td>$1,130</td>
</tr>
<tr>
<td>B</td>
<td>$592</td>
<td></td>
<td>$630</td>
<td>$1,114</td>
</tr>
<tr>
<td>5%</td>
<td>$576</td>
<td></td>
<td>$627</td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td>$570</td>
<td>$802</td>
<td>$624</td>
<td></td>
</tr>
<tr>
<td>15%</td>
<td>$570</td>
<td></td>
<td>$621</td>
<td></td>
</tr>
<tr>
<td>25%</td>
<td>$562</td>
<td></td>
<td>$614</td>
<td></td>
</tr>
<tr>
<td>Super Special</td>
<td>$559</td>
<td></td>
<td></td>
<td>$826</td>
</tr>
<tr>
<td>Special</td>
<td>$540</td>
<td>$592</td>
<td>$462</td>
<td>$604</td>
</tr>
</tbody>
</table>

Source: http://akericemill.com/price_update.php

Most rice is produced on small farms but export orders can be as much as 10,000 metric tonnes. To fill these orders, exporters purchase rice from the large mills and rough rice from small mills and then polish it. This method allows them to meet the order times, which are often two or three days. The large mills operate continuously and maintain an inventory so that they can fill orders within a few days of confirmation. The smaller mills maintain a limited amount of padi, which they will mill once an order is received from the exporters. Although the order time is only a few days, the total time from farm-gate to loading for export is typically 26–50 days, which includes the time for storage and drying. Currently most of the rice is sold on a shipment-by-shipment basis with most of the shipments occurring in the months after harvest. If the rice were sold through supply contracts that extend over several months, then it would be necessary to maintain larger inventories.

The cost and time for transport of the padi from farm to mill and rice from mill to loading port is only a small part of the total time and cost of the movement from farm-gate to destination port. Even though the distance is 300–400 km, a large portion of the rice is transported by barge from farm to mill and mill to ocean-going vessel. The cash-to-cash cycle is 6–8 weeks, but the mills will receive an advance payment of 10–30 percent from the importer.

The quality of the rice varies depending on the structure of the supply chain. The lowest quality is rice milled in two stages. It has a higher proportion of broken rice because the small mills have older technology. The mills also do not differentiate by variety or quality and often lack HACCP certification. Recent estimates of the impact of physical losses and reduction in quality on the inbound supply chain suggest they reduce the domestic value addition by more than 11 percent.33 Opportunities reducing these losses include: (i)
eliminating two-stage milling which has a significantly lower yield (estimated to exceed 25 percent lower); (ii) increasing the purchase of padi by the mills directly from farmers groups; and (iii) increasing modern facilities for storage and drying to reduce losses estimated to be five percent or more of padi production and allowing for more efficient deliveries to the larger mills.

**Figure 6.6: Current Rice Supply Chain**

![Current Rice Supply Chain Diagram]

Source: TTFA Survey and Authors.

**Table 6.3: Typical Order Time for Rice**

<table>
<thead>
<tr>
<th>Trade</th>
<th>Special</th>
<th>2-Stage white</th>
<th>1-Stage White</th>
<th>Restructured 1-Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage and Procurement¹</td>
<td>21-30</td>
<td>2-3</td>
<td>21-30</td>
<td>25-45</td>
</tr>
<tr>
<td>Processing²</td>
<td>2-4</td>
<td>35-40</td>
<td>2-4</td>
<td>2-4</td>
</tr>
<tr>
<td>Fumigation, inspection</td>
<td>1-7</td>
<td>1-2</td>
<td>1-2</td>
<td>1-2</td>
</tr>
<tr>
<td>Delivery to Gateway and Clearance</td>
<td>2-4</td>
<td>2-4</td>
<td>2-4</td>
<td>1-2</td>
</tr>
<tr>
<td>Delivery to Destination Port³</td>
<td>3-4</td>
<td>10-35</td>
<td>10-35</td>
<td>10-35</td>
</tr>
</tbody>
</table>

Notes: ¹Includes storage after harvest and delivery from storage: longer for silos; ²for 2-stage, 30 days storage between stages; ³Delivery to Asian wholesaler for specialty, to foreign buyer for others.

Source: TTFA Survey and Authors.
Opportunities for increasing the value of exported rice arise from improvements in drying and milling as well as differentiating the paddy by quality and variety and maintaining this distinction throughout the outbound supply chain. Improvement in drying and storage can be achieved by introducing silos as indicated in Figure 6.7. This intermediate stage may increase the overall time from farm-gate to export, but not significantly. The distinction between varieties can be established through contract farming arrangements involving the mills and farmers groups. The separation of varieties can be maintained at the silo and the mill and a credible system of certification introduced to maintain this distinction for packaged and branded exports. Finally, distribution channels for the different varieties can be established with sales directly to distributors using supply contacts rather than shipment-by-shipment sales.

These initiatives have been identified in earlier reports and some efforts are already underway to implement them including: (i) formation of growers’ associations and increased use of contract farming, (ii) reduction in the proportion of two-stage milling process, (iii) construction of storage facilities, which have added about one million tons capacity in the last three years, and (iv) investments in modern drying and processing technology.

6.2.3 Seafood

Vietnam has experienced strong growth in the production of seafood over the last two decades due to an increase in aquaculture, which accounted for more than 55 percent of the 5.2 million tons of fish and shellfish produced in 2010. Exports amounted to 1.35 million tons and were worth about US$5 billion, equivalent to 14 percent of global trade. The majority of the exports are shrimp and catfish (Figure 6.8: A). The exports are shipped to a large number of countries (Figure 6.8: B). The major markets, the United States, the EU and Japan, account for less than half of the exports by volume. In addition to local production, Vietnam imports frozen fish, which is then processed and re-exported to East Asia.

**Figure 6.8: Seafood Export by Volume, Value and Destination**

**A. Shrimp & Pagasius Export**

**B. Export Destination, Volume/2010**

Source: UN Comtrade.

For example, “Vietnam Food Security and Rice Value Chain -- “Beyond the Rice Bowl: Building on Past Gains to Enhance the Quality, Sustainability, and Equity of Growth in the Mekong Delta”, Collaborative Research Program, Policy Note No. 2 May 2011 and “Proposal on Restructuring the Agricultural Sector Towards Greater Added Value and Sustainable Development”, 2nd Draft, Ministry Of Agriculture And Rural Development pp. 22-23.
Of the three sources of inputs for the seafood industry, aquaculture, marine catch and imported frozen fish, the first two remain highly fragmented with thousands of farmers engaged in aquaculture, and a large number of vessels and workers engaged in maritime fishing. The seafood is processed at approximately 455 factories. Although many are state-owned, the larger factories are mostly privately owned. The large factories process several thousand tonnes per month, whereas the smaller ones process much less.

For aquaculture, the fish farms are stocked from hatcheries or river catch as shown in Figure 6.9. The output from the farms is usually purchased by collectors, who are either employed by a factory or operate as independent buyers. However, many of the large farms and farmer groups sell direct to the large factories through supply contracts. For marine catches, the collectors purchase the fish at the wholesale market but may also contract boats to secure their catch. For the imports of frozen whole fish, factories have long-term contracts with their foreign suppliers. The majority of the factories export their processed seafood directly, but there are also more than 600 traders involved in exporting seafood. The distribution channels for export are fragmented because foreign wholesalers serve a limited geographical area and seafood retailers are mostly small-to-medium in size.

The factories are located near the source of seafood, primarily in the Mekong Delta. The time for processing an order varies from a few days for domestic inputs and simple processing to a few weeks for imported inputs and additional processing. The processed fish are transported from the factory to the seaport in refrigerated trucks and ISO reefer containers, typically a distance of 300-400 km. Nearly all of the processed seafood is exported in refrigerated containers. The time from approval of order to delivery to the buyer is typically one month but can be as little as one or two weeks for exports of fresh fish and as much as four months for seafood produced from imported frozen fish. The cash-to-cash cycle is minimized since the foreign buyers often provide an advance to cover the cost of the inputs. A typical cash-to-cash cycle is four to six weeks. The factories processing imported frozen fish do not purchase the fish but merely act as service providers.

The principal bottleneck in the supply chains is the availability of inputs. The factories have excess processing capacity while the individual farms produce a small weekly output, which the collectors aggregate. It requires one to four weeks for the larger factories to collect sufficient seafood to process an order (Table 6.4). Once processed, the seafood is frozen and stored at the factory until there is a sufficient amount to ship. Typical orders range from 1-20 TEUs with the larger orders shipped in multiple consignments on a weekly basis. Although frozen fish has a long shelf life, the order cycles need to be reduced because orders are on a shipment-by-shipment basis and the buyers do not want to maintain large inventories because of the cost of low-temperature storage. The efficiency of the inbound supply chains can be increased by aggregating the output of several farms through contracts with farmer groups and by contracting vessels to supply maritime catch. The utilization of the factories can be improved by increasing the proportion of sales made through supply contracts relative to individual shipments.
Table 6.4: Order Time in Days for Seafood, Days

<table>
<thead>
<tr>
<th>Trade</th>
<th>Aquaculture</th>
<th>Maritime</th>
<th>Frozen Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
<td>3-30</td>
<td>3-30</td>
<td>60-120</td>
</tr>
<tr>
<td>Processing$^1$</td>
<td>5-7</td>
<td>5-7</td>
<td>7-20</td>
</tr>
<tr>
<td>Storage</td>
<td>0-14</td>
<td>0-14</td>
<td>14-21</td>
</tr>
<tr>
<td>Delivery to Gateway and Clearance$^2$</td>
<td>3-7</td>
<td>3-7</td>
<td>3-7</td>
</tr>
<tr>
<td>Delivery to Destination Port</td>
<td>7-26</td>
<td>7-26</td>
<td>5-10</td>
</tr>
<tr>
<td>Payment$^3$</td>
<td>0-60</td>
<td>0-60</td>
<td>15</td>
</tr>
</tbody>
</table>

Notes: $^1$ varies significantly with order size; $^2$ depends on where inspections performed; $^3$ after shipment but with advance. Source: TTFA Survey and Authors.
The value of the exports can be improved through tighter integration of quality control in the inbound supply chain and at the factory. This would reduce the loss in value caused by disease at the fish farms and poor handling of the seafood between the source and factory. Significantas significant value can be captured through further processing of the seafood at the factory. Most factories do minimal processing, e.g. gutting and filleting, but a few of the larger ones provide “table-ready seafood.” This requires not only additional processing equipment but also added quality control to meet the more stringent health standards. These improvements are indicated in the boxes in Figure 6.9. They do not alter significantly the order cycles but must be complemented by the introduction of new distribution channels that bypass distributors in favor of retailers in both grocery and food services markets.

6.3 Manufacturing Supply Chains

Vietnam’s apparel, footwear and electronics/electrical equipment manufacturing sectors are large and relatively mature. They are competitive and diversified. The role of SOEs in garment and footwear is diminishing. Most of the large firms are foreign-owned or joint ventures. The former operates primarily as vendor factories and are not involved in procuring inputs or shipping the goods to the buyers. The latter are contract manufacturers with limited involvement in these activities. However, a few of the contract manufacture some produce products for sale under their own label. The domestic manufacturers are smaller and sell primarily to the local market. Some also act as suppliers to foreign-owned firms.

The challenge for these industries is to increase both the quality of their products and the proportion of value-added domestically. Different strategies would apply to vendor factories and contract manufacturers. For the former, the challenge is to retain a favorable environment for FDI including providing clusters that offer an attractive value proposition and an efficient trade corridor connecting them to the international gateways. For the latter, the challenge is to upgrade the quality of their output and improve the performance of their supply chains.

6.3.1 Apparel

The value of Vietnam’s apparel exports has grown at an average rate of 17.6 percent over the last 15 years as shown in Figure 6.10: Part A. The value in 2011 was about US$13 billion, almost four percent of global trade. These exports include about equal amounts of woven and knitted garments, but the share of the latter has been increasing steadily. The growth in the value of exports has been driven by a rapid increase in volume offset by a gradual decline in unit value as the proportion of knitwear and basic garments has increased. The principal destinations for these exports are the United States, EU, and Japan as shown in Figure 6.10: Part B.

There are about 2,400 garment manufacturers in Vietnam, but most of the exports are produced by large factories that employ 1,000-5,000 workers. More than half of the exports are produced by companies that are either foreign-owned or have a significant amount of FDI.

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35 The public authorities responsible for regulating the seafood industry are recognized by most of the importers, but they lack capacity to perform inspections and will often accept the laboratory results from the producers. Therefore, the industry itself has taken steps to improve health and safety capacity. Most of the processing plants either have implemented or are in the process of introducing inspections and regulations in accordance with Hazard Analysis Critical Control Point (HACCP). An increasing number of producers are applying for certification under GlobalGAP, AquaGAP, BAP, ACC and other standards to access markets in the United States, EU, and Japan.
Nearly all of the yarn and fabric used to produce these exports is imported either directly by the factories or through local wholesalers (Figure 6.10: Part B). Accessories are produced locally or imported either directly or through wholesalers. Most of these imports are sourced from China, Taiwan (China) and Korea. Standard items can be obtained in two to four weeks. Customized orders take much longer to produce with delivery times of up to 60 days for fabrics. Orders for inputs are placed once the order for the garments has been confirmed. Factories provide storage facilities to consolidate all inputs prior to a production run, but the dwell times are relatively short. Typical production time is one month but this varies with order size and is shorter for re-orders.

While the majority of factories perform only assembly (CMT), an increasing proportion has some involvement in the procurement of imported inputs. About two percent of these factories provide some of their own designs and, in a few cases, market their own brands. Exports are usually shipped by sea, although about 10 percent by value are shipped by air. For sea shipments, containers are loaded at the factories,36 most of which are located near Ho Chi Minh. For larger orders, containers are shipped out on a weekly basis until the order is filled.

Both the inbound and outbound supply chains are relatively efficient. For the foreign-owned factories, the logistics are arranged by the overseas headquarters and executed by international freight forwarders (Figure 6.11). For domestic firms, the overseas transport is arranged by international forwarders nominated by the suppliers of imported inputs and buyers of the garments. The delivery time for inputs is longer for domestic firms because of limited buying power (Table 6.5). For domestic transport, the distance to the international gateways is usually less than 100 km so the cost and time for transport is minimal. Assuming that efforts to improve customs procedures, container terminals and terminal connectivity continue, then domestic logistics are not expected to become a bottleneck.

Source: UN Comtrade.

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36 Smaller shipments may be consolidated at the port.
The growth in Vietnam's garment industry has depended largely on the availability of low-cost, semi-skilled labor, although rising labor costs are expected to reduce Vietnam's competitive position relative to other low-cost providers like Bangladesh and Cambodia. However, the industry has not developed the scale of production or level of capital investment of its principal competitor, China.

To sustain the growth of exports, the garment sector needs to increase both the volume and the unit value. Different strategies are required for the vendor factories and the contract manufacturers. For the former, it is necessary to attract additional investment by developing zones that cater specifically to the needs of the garment industry, provide access to skilled labor and offer efficient connectivity to the major seaports. For contract manufacturers, it is necessary to increase both the average value of the products that are exported and the value added within Vietnam. This does not require a restructuring of supply chains but rather greater flexibility in the structure of the supply chains.

An increase in product value can be achieved by increasing the proportion of higher value products, especially woven goods (Table 6.5). It can also be accomplished by introducing higher value and more customized inputs and selling direct to retailers and brand manufacturers. This requires new inbound supply chains to obtain the inputs and upgrading the supply chains to accommodate a greater diversity of inputs and products, smaller production runs, and shorter order cycles.

In addition to increasing the unit value of the export garments, there is also a need to increase the amount of value added domestically. For domestic producers, this involves the evolution from CMT manufacturers to OEM and eventually ODM producers. The activities of the contract manufacturer are extended to include sourcing of inputs and design of products. This requires restructuring supply chains with the manufacturer participating in ordering and delivery of imported inputs and distributing the exported products to both buying agents and retailers (see boxes in Figure 6.12). Other mechanisms for increasing value addition include, such as the import of basic fabric with finishing done domestically and the improvement of domestic manufacturing of textiles and accessories so that they can be used in production of exports. Both require further adjustments in the supply chains.

### Table 6.5: Vietnam’s Ranking in Selected Garment Exports, 2011

<table>
<thead>
<tr>
<th>HS Code</th>
<th>USD 000/ton</th>
<th>Ranking*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knitted women's overcoat</td>
<td>17.5</td>
<td>60</td>
</tr>
<tr>
<td>Knitted men's shirts</td>
<td>18.0</td>
<td>58</td>
</tr>
<tr>
<td>Knitted jerseys, pullovers</td>
<td>17.9</td>
<td>73</td>
</tr>
<tr>
<td>Woven men's suits</td>
<td>47.0</td>
<td>15</td>
</tr>
<tr>
<td>Woven men's shirts</td>
<td>37.6</td>
<td>53</td>
</tr>
<tr>
<td>Woven women's blouses</td>
<td>52.0</td>
<td>48</td>
</tr>
</tbody>
</table>

*Source: Trademap, Unit Values 2009-2011.*
Table 6.6: Order Time for Apparel

<table>
<thead>
<tr>
<th>Trade</th>
<th>Vendor Factory</th>
<th>Contract Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order Processing and Procurement&lt;sup&gt;1&lt;/sup&gt;</td>
<td>14-45</td>
<td>21-28</td>
</tr>
<tr>
<td>Production</td>
<td>21-35</td>
<td>21-35</td>
</tr>
<tr>
<td>Delivery to Gateway and Clearance</td>
<td>2-4</td>
<td>2-4</td>
</tr>
<tr>
<td>Delivery to Destination Port&lt;sup&gt;2&lt;/sup&gt;</td>
<td>10-30</td>
<td>10-30</td>
</tr>
</tbody>
</table>

Notes: <sup>1</sup>Shorter time for standard fabrics and accessories, longer time for customized inputs. <sup>2</sup> Asia-Europe.

Source: TTFA Survey and Authors.
6.3.2 Footwear

Vietnam exports about 80 percent of its footwear production. The value of footwear exports has grown rapidly during the last 15 years as shown in Figure 6.13. In 2010, revenue from this trade was about US$5.2 billion and rose to US$6.5 billion in 2011.\textsuperscript{37} Vietnam is the 4th largest exporter and accounts for over six percent of global trade in footwear. Footwear with leather components continues to account for a majority of the export value. However, its share has been declining as the proportion of footwear produced solely from synthetics has expanded. The principal markets for the exports are the United States, EU and Japan, while the majority of the imported inputs is obtained from Asia (Table 6.7). The largest proportion of the exports is athletic shoes manufactured for international brands, such as Nike, Reebok and Adidas. This is followed by ladies shoes and canvas shoes.

![Figure 6.13: Value of Footwear Export and Unit Price, 1995-2011](image)

*Source: UN Comtrade.*

### Table 6.7: Destination of Exports and Sources of Inputs Based on Value, 2008

<table>
<thead>
<tr>
<th>Destination of Exports (Percent)</th>
<th>Source of Imports (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United State 23</td>
<td>Taiwan (China) 20</td>
</tr>
<tr>
<td>United Kingdom 12</td>
<td>Korea 17</td>
</tr>
<tr>
<td>Germany 8</td>
<td>China 16</td>
</tr>
<tr>
<td>Estonia 8</td>
<td>Hong Kong SAR (China) 12</td>
</tr>
<tr>
<td>Belgium 6</td>
<td>United State 6</td>
</tr>
<tr>
<td>Italia 5</td>
<td>Russia 5</td>
</tr>
<tr>
<td>Spain 4</td>
<td>Thailand 5</td>
</tr>
<tr>
<td>France 4</td>
<td>Brazil 4</td>
</tr>
<tr>
<td>Japan 3</td>
<td>Italia 3</td>
</tr>
<tr>
<td>China 2</td>
<td>India 2</td>
</tr>
<tr>
<td>Other 25</td>
<td>Other 10</td>
</tr>
</tbody>
</table>

*Source: GSO.*

\textsuperscript{37} Lefaso website.
Vietnam has about 700 shoe factories with production ranging from a few thousand pairs up to 10,000 pairs per day. About 45 percent of the factories are foreign-owned and these account for a majority of the exports. Most are vendor factories with little direct involvement in their supply chains. There are relatively few joint ventures or SOEs. Of the locally owned factories, about 40 percent are contract manufacturers that procure inputs based on the specification of their buyers. These sell the products to international wholesalers and brand manufacturers. About half of the domestic manufacturers participate in procurement of inputs but few are involved in distribution of the products. About five percent of local factories produce for their own brand.

The inbound and outbound supply chains for footwear factories are shown in Figure 6.14. Most of the materials are imported. For leather, procurement and storage are challenging because of differences in the type and quality of leather. However, the resins used for manufacture of plastic shoes are relatively standard and can be kept in inventory by domestic wholesalers. The production of leather shoes involves smaller order sizes and is more labor-intensive because the shoes are hand-assembled and the stitching is done with semi-automatic machines. The production of plastic shoes is more capital-intensive, especially for those involving injection molding, but the orders are larger.

Both imported materials and the exported products are shipped by sea in containers. The international movements are arranged primarily by forwarders nominated by the suppliers of inputs and buyers of the products. The typical time from approval of an order to delivery to the buyer’s representative at the loading port is 60-90 days. The order cycle begins with approval of the design prior to order confirmation and concludes with the delivery to the buyer’s overseas warehouse. The cycle takes approximately 105-150 days while the typical cash-to-cash cycle is also 150 days. Since most factories are located within 100 km of a major seaport, the time and cost for domestic transport is a small proportion of the total movement.

Vietnam’s competitive advantage in the production of leather footwear derives from the cost and availability of skilled labor to produce footwear that meets the standards of the international brands. For plastic shoes, its competitive advantage derives from the availability of low-cost labor. The inbound and outbound supply chains are relatively efficient. The principal opportunity for improving their performance is reducing the time for procurement of materials. For leather, this involves not only changes in sourcing but also greater involvement in finishing and better planning of production. For plastic footwear, this involves improvements in inventory management and production planning.
Figure 6.14: Footwear Supply Chains with Improvements

Table 6.8: Average Order Time for Footwear

<table>
<thead>
<tr>
<th></th>
<th>Leather</th>
<th>Plastic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement$^1$</td>
<td>30-45</td>
<td>10-30</td>
</tr>
<tr>
<td>Storage</td>
<td></td>
<td>7-20</td>
</tr>
<tr>
<td>Processing$^2$</td>
<td>30-90</td>
<td>30-60</td>
</tr>
<tr>
<td>Delivery to Gateway and Clearance</td>
<td>2-4</td>
<td>2-3</td>
</tr>
<tr>
<td>Delivery to Destination Port</td>
<td>10-30</td>
<td>25-30</td>
</tr>
</tbody>
</table>

Notes: $^1$30-45 import leather; $^2$ Single shipments or replenishment

Source: TTFA Survey and Authors.
The challenges facing the footwear industry are different from those of the garment industry because the domestic firms are able to design and produce products for exports. In order to increase the value of footwear exports (Figure 6.15), it is necessary to reverse the trend towards production of low-value plastic footwear (Figure 6.16) while improving the quality of the leather shoes.

![Figure 6.15: Average Value, Top 100 Footwear Exporters](image1)

![Figure 6.16: Value of Footwear Export by Material](image2)


For the inbound supply chains, there will need to be a reduction in order cycles due to the higher fashion content in leather footwear. This includes both women’s shoes and athletic shoes. However, the main challenge will be to secure reliable deliveries of good quality leather. This requires developing chains for importing blue leather that can be locally finished and providing a separate zone for finishing leather that will minimize deleterious environmental impacts. For the outbound supply chains, it requires greater flexibility so as to diversify into new markets, both within the region and overseas and to increase the proportion of finished goods shipped direct to distributors and retailers.

### 6.3.3 Electronics

After several decades of stagnation, Vietnam’s electronics sector is experiencing rapid growth driven by foreign investment. The volume of exports increased more than six-fold during the last decade (Figure 6.17: Part A). However, the value of exports represents less than one percent of Asia’s exports. The majority of the exports are shipped to Japan, EU and the United States (Figure 6.17: Part B). Products shipped to Japan and China are mainly subsystems to be assembled into final products, while those shipped to the EU and the United States are mostly final products.
Currently, the industry is small and concentrated in relatively few firms. Of the 350 factories, fewer than 10 produce about 50 percent of the exports. Foreign-owned firms, primarily Japanese and Korean, account for 95% of the export value. The mix of products has steadily increased as new large plants are introduced (Figure 6.18).

**Figure 6.17: Exports of Electronics and Electrical Equipment**

*Part A: Export Value*  
*Part B: Export Destinations*

![Graph showing export value and destinations over time](image)

*Source: UN Comtrade.*

Vietnam’s electronics industry includes firms involved in all tiers of production from brand manufacturers to contract manufacturers, producers of components and subassemblies and manufacturers of basic components and material. Production can be divided into three segments: fabrication of chips (currently limited to a single large plant), assembly of electronic components and appliances (largely a tier one operation) and manufacture of electrical equipment and power components primarily for construction.
The first two segments are performed primarily by vendor factories located in export processing zones. The factories use imported inputs and produce for both export and the domestic market. They operate according to semi-annual or annual production schedules provided by their headquarters. Suppliers receive procurement orders a month or more prior to the start of production and deliver the supplies according to a just-in-time schedule. Delivery of the products is arranged by the parent company using regional distributors and other corporate distribution channels. The factories have sophisticated supply chain management and tight order cycles that place significant demands on Vietnam’s logistics and regulatory services.

Electrical power equipment used in construction, including bus bars, is produced by local and foreign manufacturers in response to individual orders. Many of the parts are kept in inventory. The products are delivered as individual shipments of project cargo.

Vietnam’s competitive position is based on the availability of low-cost, semi-skilled and skilled labor and zones designed to facilitate production and provide good connectivity to the major seaports. All but the most expensive products are shipped by sea in containers. Most of the factories are located within 100 km of the major seaports so that the time and cost for land transport are minimal. Since the larger factories operate on a just-in-time basis with multiple shipments received each day, the reliability of land transport is a significant concern.

The primary objective for the medium term is to sustain the growth in production and the employment derived from that growth. Complementing this would be an increase in value addition through an increase in the inputs supplied by domestic industry.

The immediate challenge for Vietnam is to encourage additional FDI in the first two segments. This requires development of production clusters with access to trade corridors that allow rapid turnaround of freight shipped by air or sea. It also requires simplification of administrative procedures, especially those related to trade facilitation, through IT based procedures and transactions that complement those of the industry. The second challenge is to develop domestic capacity for supplying inputs to the vendor factories. This would begin with the production of basic parts but evolve to supplying locally designed components.

A number of efforts to achieve this are on-going including improving port facilities and access, modernizing customs procedures, and developing industrial zones located near the major sea and air gateways that are attractive to electrical and electronics equipment manufacturers.
Table 6.9: Average Order Times for Electronics Equipment

<table>
<thead>
<tr>
<th></th>
<th>Customized</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
<td>5-28</td>
<td>1-7</td>
</tr>
<tr>
<td>Production (Assembly)</td>
<td>7-32</td>
<td>2-7</td>
</tr>
<tr>
<td>Delivery to Gateway and Clearance</td>
<td>&lt;1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Delivery to Destination Port</td>
<td>3-30</td>
<td>3-30</td>
</tr>
</tbody>
</table>

Notes: ^1printers, copiers; ^2delivery based on fixed schedule. Source: TTFA Survey and the Authors.
6.4 Supply Chain Performance

The six trades discussed above can be differentiated according their sensitivity to the time and cost for delivery of inputs and outputs. The agricultural products are time-sensitive for inputs but less so for outputs because of the ability to store rice, coffee beans and frozen fish for long periods. The time-sensitivity of manufactured products varies with the order cycle, which is measured in days for electronic components but in months for garments. In general, the sensitivity increases with product value. This is due in part to the increase in carrying cost for inventory but more important is the increase in product value with faster delivery to retail outlets and consumers.

Currently, most of the export manufacturers focus on minimizing the delivered cost of their products rather than increasing their delivered value. Since domestic logistics is a relatively small portion of the order cycle and delivered cost (Table 6.10), the greatest potential for reducing either lies in changing the performance of the external component of the inbound and outbound supply chains. However, domestic logistics can have a significant impact on reliability of delivery times. Of particular importance are clearance procedures for imported inputs and the transfer of exports through the seaports in order to connect with international container shipping services.

Table 6.10: Importance of Logistics

<table>
<thead>
<tr>
<th>Trade</th>
<th>Domestic Logistics Cost as % FOB value</th>
<th>Logistics Time as % of FOB Order Cycle*</th>
<th>Critical Time Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>1-2</td>
<td>10-20</td>
<td>Phytosanitary</td>
</tr>
<tr>
<td>Coffee</td>
<td>2</td>
<td>20</td>
<td>Phytosanitary</td>
</tr>
<tr>
<td>Seafood</td>
<td>1.5-2.5</td>
<td>33-42</td>
<td>Inputs, Testing</td>
</tr>
<tr>
<td>Garments</td>
<td>2.5-4</td>
<td>40-44</td>
<td>Input Delivery</td>
</tr>
<tr>
<td>Footwear</td>
<td>1-2</td>
<td>33</td>
<td>Input Delivery</td>
</tr>
<tr>
<td>Electronics</td>
<td>&lt;1</td>
<td>5</td>
<td>Port transfer</td>
</tr>
</tbody>
</table>

Note: *From order of inputs to loading of outputs at international gateway.
Source: TTFA Survey and Authors.

6.5 Strengthening Supply Chains: Cross-Cutting Initiatives

In developing a set of initiatives to support improvements in Vietnam's trade competitiveness, it is important to distinguish between the requirements of trade in agricultural and manufactured goods. The major challenges faced by each are summarized in Table 6.11. Whereas agricultural exports require restructuring of their inbound supply chains in order to improve the supply of inputs, manufactured exports require greater variety in their inbound and outbound supply chains to increase diversity in products and markets.
When addressing these issues, it is important to differentiate between the responsibilities of (i) exporters, who mobilize resources and produce goods that are competitive in terms of value and cost, (ii) government, which creates a supportive environment for trade, and (iii) logistics services providers, which facilitate trade by improving the cost, time, and reliability of delivery and adds value through storage and consolidation. Those involved in production and distribution of exports need to explore opportunities for increasing the value of these exports. The government should provide a common vision for the evolution of trade and provide both the logistics infrastructure and the regulatory and financial policies to support this vision. Logistics service providers need to develop value added services in response to these changes, integrate these services, and offer economies of scale and scope in their services.

Table 6.11: Crosscutting Supply Chain Issues

<table>
<thead>
<tr>
<th>Agriculture</th>
<th>Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving reliability of supply</td>
<td>Improve quality of products</td>
</tr>
<tr>
<td>Introduce differentiation by quality</td>
<td>Improve input supply chains</td>
</tr>
<tr>
<td>Integrate quality control</td>
<td>Improve domestic supply network</td>
</tr>
<tr>
<td>Increase downstream processing,</td>
<td>Develop both VF and CM</td>
</tr>
<tr>
<td>Develop new distribution channels</td>
<td>Expedite clearance of inputs</td>
</tr>
<tr>
<td></td>
<td>Develop new distribution channels</td>
</tr>
</tbody>
</table>

Note: VF = vendor factories; CM = contract manufacturers
Source: Authors.

Table 6.12: Proposed Initiatives

<table>
<thead>
<tr>
<th>Initiatives</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture</strong></td>
<td></td>
</tr>
<tr>
<td>Contract Farming</td>
<td>Improve quality and reliability of supply,</td>
</tr>
<tr>
<td></td>
<td>Better utilization of processing capacity</td>
</tr>
<tr>
<td></td>
<td>PPP investment in agriculture</td>
</tr>
<tr>
<td>Third-party rice storage</td>
<td>Economies of scale in collection of padi</td>
</tr>
<tr>
<td></td>
<td>Improve quality of padi delivered to the mills</td>
</tr>
<tr>
<td></td>
<td>Consolidate inventories and smooth delivery to the mills</td>
</tr>
<tr>
<td>B2B Rice Trading</td>
<td>Create incentives for farmers to improve quality of padi</td>
</tr>
<tr>
<td></td>
<td>Increase value of exports through specialization and branding</td>
</tr>
<tr>
<td></td>
<td>Allow farmers to capture more of value addition</td>
</tr>
</tbody>
</table>
A set of initiatives for increasing the competitiveness of agricultural and manufacturing exports through improvements in their supply chains is presented in Table 6.12 along with their objectives. The expansion of contract farming and strengthening of futures contracts is meant to simplify the interaction between farmers and processors/traders of agricultural goods. In order to increase the use of contract farming, it is necessary to have a robust procedure for issuing forward contracts. This requires standard format for

<table>
<thead>
<tr>
<th>Initiatives</th>
<th>Objective</th>
</tr>
</thead>
</table>
| Product Certification                      | Enable product differentiation  
|                                            | Improve product quality control                                           |
| SPS                                        | More effective regulation of health and sanitary conditions from the fish  
|                                            | farms to the markets                                                      |
| Forward/Futures Contracts                  | Help farmers deal with seasonal fluctuation of the agricultural products  
|                                            | and their global prices                                                   |
| **Manufacturing**                          |                                                                           |
| Industrial Clusters and Supporting Industries | Strengthen backward linkages in zone planning with catering specific  
|                                            | needs of the industry (local produced components, logistics services, and  
|                                            | skilled labor)                                                            |
|                                            | Develop supplier networks                                                 |
|                                            | Provide efficient logistics                                               |
| Vietnam as an attractive subcontracting destination | Attract FDI  
|                                            | Private sector development                                                |
|                                            | Improve trade deficit                                                     |
| **Both**                                   |                                                                           |
| Freight Corridor Planning                  | Reduce transit times and costs and increase reliability                   |
|                                            | Encourage efficient investment in transport infrastructure including  
|                                            | international gateways                                                    |
|                                            | Coordinate planning among agencies regulating transport and border        |
|                                            | management                                                               |
| PPP for infrastructure-based services      | Increase efficiency and competitiveness of services utilizing public      |
|                                            | infrastructure                                                            |
|                                            | Insure equal access                                                       |
| Customs Automation                         | Reduce time and increase predictability for clearance of imported inputs  
|                                            | Simplify logistics for clearance of imported inputs and exported products |
| Private Inspections                        | Strengthen product quality control                                        |
|                                            | Expedite clearance                                                       |
| Trade Finance                              | Allow producers of exports to extend their involvement in supply chains   |
|                                            | Reduce the risk of expanding into new markets                             |

*Source: Authors.*
allocating obligations and liabilities backed up by a mechanism for contract enforcement to minimize counterparty risk. It also requires a mechanism for adjusting the financial terms of the contract to reflect changes in commodity prices between when the contract is signed and when it is executed. This is normally done using some combination of the spot prices at time of signing and time of execution. This differs from the normal forward contracts in which the price is negotiated at the time of signing. It requires a transparent mechanism for determining the spot price at some time in the future.

Progress has been at the policy level regarding contract farming and forward contracts. Decision No. 80/2002/QD-TTG by the Prime Minister in 2002 encouraged enterprises of different economic sectors to sign green product consumption contracts with producers. To improve the effectiveness of green product consumption by contract, Order No. 25/2008/CT-TTG in 2008 was issued.

The determination of a reference spot price for a commodity that can be used in a forward contract is only possible if there are frequent trades and well-defined grading standards. There are a number of agricultural commodity exchanges in the region that were established for this purpose (Table 6.13), however, not all have sufficient volume to accomplish this. Such is the case for Vietnam where the volume of cash trades for Robusta coffee and white rice have not been sufficient to produce reliable price indices.

The largest futures exchanges for agricultural commodities outside of the US and EU are located in China, India and Brazil. The first two were established by government, but the third was introduced by the private sector. All are regulated by government. Their success has been due largely to the size of their market and their role in overcoming the fragmentation of their physical markets, due in part to poor infrastructure. Another example of a successful exchange is that developed by Malaysia specifically for palm oil. This was largely a private sector initiative that benefited from Malaysia’s dominance of the trade in palm oil. Its market power allowed it to establish an international price benchmark for palm oil. It is unclear whether Vietnam can replicate this effort given its market share in trade in Robusta coffee, however, it may be possible assuming that the grading system is improved.

In the absence of a sufficient volume of transactions, Vietnam can develop reference prices using international and regional indices. In the case of rice, the quoted prices for US No. 2 rough rice and Thai 5% white milled rice can be used together with adjustment factors for different grades. However, this requires that the enforcement of grading standards be improved. For coffee, there is no international price index for Robusta green beans, only for Arabica (ICE futures). In this case, adjustment factors would be needed to account for both grade and the difference in value between Arabica and Robusta.

Variations include minimum/maximum price forward contracts, price-to-be fixed contracts, and long-term contracts with fixed or floating prices.

For rice, the trade is dominated by G2G trade, which limits the volume. For coffee, the attempt to establish an exchange based solely on physical trades produced relatively little activity.

There is a standard for Arabica coffee on the Inter Continental Exchange (ICE), but the short-term variations in prices are not sufficiently correlated with the price of Robusta coffee.
Third-Party Rice Storage

The development of third-party warehousing for rice would provide a value-added service by improving drying and storage of padi as well as providing a mechanism for supporting forward contracts as a financial hedge. This initiative requires a clear definition of the role of these storage facilities and a legal framework for enforcing warehouse receipts\(^{41}\) and minimizing counterparty risk on of padi to quickly fill large orders and manage supply contracts. It could also be designed to maintain the differentiation of rice by variety and quality.

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\(^{41}\) The warehouse receipt is an asset-backed security (normally a commodity) that serves as a guarantee. They are negotiable and can be redeemed for inventories of the same grade and value as those for which they were originally written.
Warehouse receipts allow farmers to create bankable collateral by depositing non-perishable commodities in third party warehouses where the quality of the commodity is maintained in the interest of holders of the receipts. It requires that commodity grades and standards be accepted within the trading community and supported by regulatory policies. The warehouse receipt allows the conversion of illiquid agricultural inventories in to cash thereby facilitating trade.

**G2G Rice Trading**

The present system for export rice is dominated by large-scale government-to-government contracts. While this arrangement is helpful for encouraging the growth in volume of exports, it tends to discourage the increase in the value of rice exports. Since these arrangements are managed by government trading entities, there is no interaction between farmers and consumers. Furthermore, these orders are usually for low-to-medium grades of rice and the shipments are assembled with little concern as the source or variety of the padi used to fill the orders. Also, the terms are not usually released to the market, contributing to poor transparency.

Internationally, the role of government in rice exports has been steadily declining. Thailand ended government monopoly of its rice trade in the 1950s. Pakistan did the same in the 1970’s. Governments continue to play a key role in deciding the volume exported since rice is generally considered a strategic good. However, government-to-government transactions, which used to account for about half of world trade in the 1970s, have declined dramatically. They were estimated to represent 7 percent of global trade in 1999 and although there was a slight uptick in the early 2000s as governments sought to counter declining international prices, this type of trade is now limited to special situations.

Efforts to improve the quality of both padi and milling require financial incentives for farmers and the operators of rice mills. It also requires the ability to separate the padi and rice based on variety and source. Trade in rice differentiated by variety and grade involves smaller shipments and a larger number of distribution channels as well as a more sophisticated marketing system than for trades in undifferentiated white rice. These require the flexibility and variety of services offered via B2B trading.

**Quality Control**

The previous initiatives refer to the need for better monitoring of the quality of agricultural products and, in particular, standards for grading commodities. The standards used for grading refer to their physical characteristics but for seafood also include health standards, specifically SPS standards. The development of a transparent and reliable system for certification of quality is necessary to maximize the value of exports of differentiated products. This requires grading standards that are acceptable to the export markets and a public-private partnership, usually in the form of commodity boards, to enforce these standards. It also implies the capability not only to test export shipments but also to trace individual shipments back to the farm.

In order to derive maximum value from this segmentation, many countries have established certification procedures. In the case of rice, Pakistan, has established a quality review committee in consultation with the Rice Exporters Association of Pakistan to certify the quality especially for Basmati rice. Thailand has gone further and copyrighted the brand Hon Mali aromatic rice. Exports are inspected and certified by National Bureau of Agricultural Commodity and Food Standards. In addition, they are classified into five grades based on the percentage of whole kernels and head rice.

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42 Governments continue to play an important role in the first phase of the marketing cycle, by procuring paddy at minimum producer prices. They also manage rice stocks or to adopt trade policy measures in order to stabilize domestic market prices, however, the actual trading of rice is done almost entirely by the private sector.

43 For example, the international rice market is segmented into a large number of varieties and qualities that responding to consumer preferences. Ordinary indicarices are the most commercialized, followed by aromatic (Basmati and fragrant) rice, medium rice and glutinous rice. These accounted for about 80%, 10%, 9% and 1%, of production, respectively, in 2000.
Manufacturing Clusters and Subcontracting Networks

Many of the examples of successful development of subcontracting industries date from the 1980's and early 1990's, most notably those in Korea's electronics industry and Taiwan (China)'s textile and footwear industries (Box 6.1). The development of subcontracting industries can be facilitated through establishment of clusters and introduction of policies that encourage use of local suppliers.

Box 6.1: Subcontracting Networks in Korea and Taiwan (China)

In Korea, the contribution of SMEs increased steadily through the 1980s reaching almost 50% in the early 1990’s. However, their role was primarily as suppliers to the larger firms. For the electronics industry in particular, the SMEs were primarily part multi-layered intra-firm production networks managed by the leading conglomerates (chaebol). These networks provided the smaller firms with qualitative improvements in development of both product technology and processing through the financial and technical support offered by large firms. At the same time, the larger firms benefit from the flexibility in terms of labor costs and specialized skills. Within the electronics industry, it is estimated that about 70% of SMEs are subcontractors. The subcontracting ties extend from foreign firms to large Korean firms to local SMEs as well as firms in low wage countries. While the large firms concentrate on technically sophisticated aspects of production and product design and development, the subcontractors focus on production of standard commodities, which allow them to focus on improving production technologies often in collaboration with other small firms. The large firms then utilize the technical skills, initiatives and ideas of strategic SMEs. The large firms may provide machinery, raw materials, parts, finance and technical assistance to improve quality.

Taiwan (China)'s shoe industry began to grow rapidly from the early 1970’s to become the world’s largest exporter of shoes. It was successful in competing in terms of both time and cost using territorially-based production and marketing network with coordination provided by Taiwanese trading companies. Over half of the shoes were made in factories with limited automation and fewer than 100 workers. The competitive advantage derived the highly diversified product portfolio while their main competitor, South Korean firms concentrated on automated production of athletic shoes. Taiwanese shoe makers focused on fashion and casual shoes made with synthetic materials, as well as special and work shoes most of which had small order sizes and variety of styles. They benefits from a domestic supplier networks for synthetic materials and manufacturing equipment. The trading companies provide detailed knowledge of local specialized manufacturers, collect market information and negotiate with international buyers. In this way they generate economies of scale and scope through a hierarchy of specialization and networks of production among independent producers. This enterprise network was maintained when Taiwanese firms moved to new production sites in Southern China to reduce production costs.

Source: Lu-Lin Cheng, "Embedded Competitiveness: Taiwan (China)'s Shifting Role in International Footwear Sourcing Networks", Duke University, 1997; Khalid Nadvi, "Industrial Clusters and Networks: Case Studies of SME GrowthAnd Innovation, UNIDO, October 1995.

For Vietnam, the challenge is to establish clusters that will accomplish four objectives: (i) attract FDI in vendor factories, (ii) provide a supportive environment for contract manufacturers, (iii) create opportunities for domestic suppliers; and (iv) reduce trade deficit. In order to be successful, these clusters must be located and designed to maximize the value proposition for all three. This value proposition includes the standard fiscal incentives and operational advantages benefits including economies of scale and scope in the provision of labor, logistics services and essential resources. It would also include specific advantage in terms of layout and location that benefit each group. This implies a revision of the current program for developing export processing zones.
The clusters should also be designed to support the development of local supplier networks. Since the same type of incentives benefit both the foreign and domestic suppliers, government policies are needed to support efforts by local suppliers to improve the quality of the inputs they provide to export manufacturers and to diversify into more sophisticated inputs. This requires collaboration between government, foreign manufacturers and local suppliers with the general objective of enhancing the competitiveness of export products. Such an approach was used to develop the Thai Automotive Parts Industry (Box 6.2).

Customs Modernization

A second initiative for manufactured exports is acceleration of the customs modernization program, specifically those components that simplify and expedite clearance of imported inputs and exported products. For imported inputs, it is necessary to simplify procedures for temporary admission and certification. For exported products, it is necessary to expedite the documentary and certification procedures. There are various mechanisms for accomplishing this, but most involve an increase in the level of use of IT and development of a formal program of cooperation between customs and the larger shippers. The IT systems are used to analyze trading behavior as part of a risk management system that focuses enforcement efforts and reduces the resources required for physical inspection. The system is supplemented

**Box 6.2: Subcontracting in Thailand Automotive Parts Industry**

The growth of the Thailand automotive parts industry was a result of three factors.

- Development of the automotive assembly industry beginning in the 1970s promoted as part of the Thai Government’s industrial policy.
- Government policy regarding local component in automotive manufacturing.
- Establishment of manufacturing clusters on the eastern seaboard specifically targeting the automotive industry.

The Eastern Seaboard already has an industrial base as part of the refining and processing of oil and gas. The local content requirement effective from 1975 to 1999 increased from 25% to 70%, which led to a transformation from assembly of CKDs to an expansion of local production parts made by traditional suppliers to the gradual buildup of Thai suppliers. This led the large assemblers to coordinate efforts to develop and create local supplier networks, which allowed the parts manufacturers to achieve economies of scale. The local content provisions also targeted specific components beginning with those having a low technology component, e.g., radiators, batteries, exhaust pipes and parts of diesel engines but subsequently including components of diesel engines. This lead to a collaboration among local and foreign suppliers in production of major subassemblies. Over the last decade, the growth of the parts manufacturing industry was sufficient that multinational carmakers chose Thailand as part of their global production network for parts. Japanese and US automotive assemblers such as Mitsubishi, Toyota, Ford, GM and Isuzu now use Thailand as their regional export base with production exceeding 2 million units per year. The proportion of domestically produced vehicles that are exported has risen above 50%. More recently trade in automotive parts between the two regional parts manufacturers, Thailand and India, has increased substantially.

The success of the government was due to a balanced approach. While it was aggressive in raising local content, it did not discriminate against FDI and gradually liberalized trade in automobiles. Also its efforts were matched by the willingness of Japanese assemblers to adjust and comply with these policy requirements with results went beyond simply increasing level of localization of parts. At the same time, the local parts industry gradually increased its technological capabilities in response to competition as a result of liberalization of trade. This was accomplished largely through technological licensing agreements and acquisitions of technology companies.

**Source:** Techakanont, Kriengkrai, "Thailand Automotive Parts Industry", Intermediate Goods Trade in East Asia: Economic Deepening Through FTAs/EPAs, BRC Research Report 5, 2011.
with a program for collaboration with the larger traders that have a record of compliance. This program expedites clearance for the participants but provides for post-clearance audits and occasional inspections to insure compliance. It can have various forms, one of which is the Authorized Economic Operators program developed by the EU. Chapter 5 discusses these issues in much more detail.

**Trade Corridors**

Several other initiatives would benefit both agricultural and manufactured supply chains and hence exports. The first involves a change in emphasis in transport planning from a physical network to trade corridors. These corridors are the principal routes used for export trade from the source of inputs and/or production of exported goods to the international gateway from which these goods are shipped. This change in focus is complemented by a change in emphasis from quality of infrastructure to quality of service. Planning for improvement of the performance in these corridors requires a separate planning unit. This could be set up in MOT, however, it must coordinate with other agencies involved in regulating the movement of goods and vehicles along the corridor. This issue is discussed in greater details in Chapter 4.

**Public-Private Partnerships for Logistics**

The second initiative involves refinement in the use of Public-Private Partnerships in the development of logistics infrastructure and related services with particular emphasis on the role of the private sector in providing these services. This requires an effective and transparent mechanism for selecting private operators, monitoring their performance and insuring contestability. It also requires a mechanism for maintaining, renewing and expanding the principal infrastructure including ports, airports, border crossings, Intra-modal and Inter-modal terminal shipping. In the case of the gateways, it requires coordination with customs to insure efficient operations. This would include Inland Container Depots and dry ports, which receive or dispatch international freight under a standard international marine bill of lading. This issue is discussed in greater detail in Chapter 4.

**Physical Testing**

The third initiative involves changes in the physical inspection and testing of imported inputs and exports. It is important that these be performed accurately, effectively and quickly. The first attribute requires proper certification of the facilities and procedures. The second requires the use of risk management to make efficient use of the available resources while providing a sampling rate that offers an acceptable level of certainty. The third attribute requires the use of private laboratories, which tend to be more time sensitive and generally offer more coverage then centrally located government laboratories. In addition, there is a need to improve the coordination between the agencies responsible for these activities and the other agencies responsible for border management. In order to accomplish this, there must be a mechanism for (i) certifying private laboratories, (ii) identifying the range of tests to be provided, (iii) setting the prices for tests, and (iv) developing key performance indicators for speed and reliability of the tests performed.

**Trade Finance**

The final initiative covers the various components of trade finance including access to foreign exchange, loans for working capital, and mechanisms for mitigating the risks associated with foreign trade. These are important because they affect the decisions of exporters regarding increasing the value of their products and their participation in inbound and outbound supply chains. Vietnam's commercial banks offer a full range of instruments for providing funds to facilitate exports. Overdrafts are available based on the strength of the exporter's balance sheet. Loans for working capital are available based on export contracts. Funds are also available through discounting letters of credit, factoring current receivables from foreign importers, and forfeiting long-term receivables including trade bills or promissory notes. However, interest costs are
high and subject to government adjustment of benchmark rates. Access to credit in commercial terms on collateralized basis is a challenge for traders, in particular SMEs.

Despite government management of foreign exchange rates and requirements for reporting transactions, importers and exporters have access to foreign exchange accounts and can obtain foreign exchange through spot purchases, swaps and forward contracts. Some commercial banks offer trading in currency options. However, these instruments are not widely used because of the fees involved, a lack of understanding of their benefits and uncertainty surrounding government’s periodic adjustments in exchange rates.

While the access to trade finance does not appear to be a major constraint, the demand for trade finance and export guarantees is increasing due to: (i) a shift in method of payment towards un-secured, open-account tractions and away from Letters of credit and other guarantees; and (ii) an increase in the period for payment by importers as part of the competition among exporters.

Although there is an on-going effort to reduce order cycles, these are offset by the demand for longer payment periods with the result that cash-to-cash cycles are increasing. At the same time efforts to improve product quality and value addition through: (i) increasing involvement in upstream processing of inputs and downstream processing of export products, (ii) diversifying sources of inputs and export markets, and (iii) developing new distribution channels are increasing commercial risk and the demand for working capital. These changes require an increase in both availability and tenure of trade finance, a reduction of interest rates for pre- and postshipment finance and guarantees to mitigate the risk of both financial institutions and exporters. Improvement in trade finance is especially important for domestic and joint venture enterprises, which lack both the market power and access to international capital markets of their foreign-owned competitors.

Examples of the different types of initiatives that can be introduced to increase the availability and reduce the cost of trade finance, including guarantees, are shown in Box 6.3. Most of these are initiated through Central banks, Import-Export Banks that have the mandate to promote trade or Export Credit Agencies (ECA).

6.6 Summary

Major differences in the structure of supply chains, generally between agriculture and manufacturing products for export, but also specifically for each product, together with differences in the role of Vietnamese stakeholders in these chains, make for different recommendations for improvement. For some, like electronics, some streamlining in the form of more efficient processes is all that is needed. For others, like coffee, restructuring in the form of eliminating intermediaries is recommended. For all products discussed here, a greater role played by Vietnamese stakeholders, such as increasing local contents of inputs, or development of subcontracting capabilities, will be important.

Regardless of the type of strengthening required, the government has a proactive role to play, whether to facilitate or to directly intervene by establishing regulations or institutions. The latter are vital to success; in the annals of development, attempts to undertake restructuring without the institutional mechanisms to replace existing arrangements have been known to produce worse outcomes than without restructuring. The next chapter looks at the institutional framework to support trade facilitation.
Box 6.3: Selected Trade Finance Initiatives Following 2008 Financial Crisis

**Chile - Trade Finance**
- Corporación de Fomento de la Producción or CORFO, the government agency that provides financial support to the private sector established
  - new lines of financing and insurance
  - a new US$200M line of “second floor” financing for working capital needs,
  - a US$100M “second floor” line for non-bank factoring agencies,
  - a US$500M in long-term loans to finance investments and US$50M for its guarantee fund for exporters.
  - a US$50M fund to cover default insurance for SME credits.
- Bankco Estado allocated
  - an additional US$130M for default insurance for SME credits

**India - Trade Finance, Bank Liquidity**
- The Reserve Bank of India (the Central Bank)
  - extend interest rate ceiling on rupee credit extended
  - increase interest rates ceiling on import and export credit (foreign currency denominated) increased
  - extend interest rate for post-shipment rupee export credit extended;
  - increase limit of Export Credit Refinance facility increased from 15% to 50%
  - increase period of entitlement increased for both pre- and post-shipment credit at a concessional rate
  - establish refinance facility of RS 50Bn for the EXIM Bank of India;
  - extend interest subsidy for pre and post-shipment export credit extended specifically for SMEs.

**Turkey - Trade Finance, Bank Support/Liquidity**
- The Export-Import Bank of Turkey
  - expand facilities from TL1.5Bn to TL2Bn
  - expand of the scope of its export credit and insurance portfolios,
  - increase its credit limit and value of insurance and guarantees,
  - lower short-term TL-denominated export credit lending rate
  - increase export credit lending rate for USD denominated short-term export credits
  - extend maturities of short-term export credits.
  - initiate new credit program to promote exporters in international trade fairs.
- The Export-Import Bank and the Central Bank of Turkey
  - improve exporters’ access of the Central Bank’s discount facility.
  - increase discount limits from US$350M in 2008 to US$1Bn.

7.1 The Institutional Framework

The institutional framework for trade facilitation can be viewed as its “soft” infrastructure, having a major impact on the effectiveness and efficiency of the entire trade in goods, especially the export supply chain.\(^\text{44}\) This framework consists of policies, laws and regulations, management systems and organizations that ensure compliance of and undertake regulation on the basis of laws as well as oversee the conduct of trade.

The components of this framework are represented in Figure 7.1. At the apex of the framework are macro policies relating to trade competitiveness pertaining to international commitments made by the country. These policies and commitments offer guidance on general strategic directions. Policies also exist at regional and local levels and guide the planning and development of programs and projects at these levels.

The next level is the governing regulations and systems for managing the trade competitiveness process. Specifically, these are:

- The legal framework governing the conduct of trade, transport and logistics facilitation, such as laws and regulations governing business and development of logistics, customs and border management, and management and establishment of transport infrastructure; and

- The management system for the pillars of trade facilitation detailed above, which are responsible for administration of the government’s affairs, as well as the organizations responsible for the implementation of policies in compliance with legal rules and administrative regulations.

These rules and systems have direct impacts on each stage of the trade facilitation process and are the mechanisms for translating policies into practice.

\(^{44}\) Soft infrastructure, consisting of factors that make up the business environment can be distinguished from hard infrastructure which is made up of the transport network—highways, railways, ports—as well as the communications infrastructure, including ICT.
At the bottom of the institutional pyramid are the economic activities structured along key pillars of trade competitiveness. As indicated in Chapter 1, the major determinants of trade and logistics facilitation performance consist of transport infrastructure and logistics services, supply chain organization, and regulatory procedures for import and export. The coordination of these determinants under the existing legal framework and organizational structure in the middle of the pyramid, gives substance to the national strategic framework for trade competitiveness on top of the pyramid. The implementation will also entail coordination and collaboration among stakeholders, both state and non-state.

Figure 7.1: Structure of Institutional Model for Trade Facilitation in Vietnam

This chapter reviews in further detail the organizational structure in the second tier of the pyramid. The first tier of the pyramid is discussed in Chapter 8. The legal framework section of the second tier, and the detailed discussion on three sections in the third tier of the pyramid were presented in Chapters 4, 5 and 6. This chapter offers specific recommendations for policy formulation and implementation improvement, in particular on issues related to institutions of trade facilitation.
7.2 The Policy Framework

7.2.1 The National Dimension

At the macro-level, Vietnam’s institutional system for trade facilitation is guided by strategies enunciated in several major documents. These are:

(i) Resolution of the 11th National Congress of the Communist Party of Vietnam

This Resolution provides the following general guidelines on trade facilitation:

- Developing modern infrastructure and industries serving logistics through focusing on the development of loading equipment at seaports and airports; automobile production, railway engines, railway carriages, means of heavy transport, sea and river vessels; machinery for constructing bridges, roads and the production of building materials, especially high-quality building materials; and electric and telecommunication equipment;

- Establishing four major trade and service centers which are both domestic commercial hubs and gateways for foreign trade in Ha-Noi, Ho Chi Minh City, Da-Nang and Can-Tho;

- Focusing on constructing and making breakthroughs in the system of economic infrastructure to meet the country’s development. This means completing the plan for the country’s infrastructure system, investing in key economic infrastructure projects in support of high-tech parks, industrial parks and economic zones, completing essential traffic systems, coastal and border roads, modernizing important airports, seaports and key roads connecting China, Laos and Cambodia. Developing a shipbuilding and repair industry, exploiting and refining oil, marine logistics and tourism; boosting investment in infrastructure in big cities, especially Ha-Noi and Ho Chi Minh City;

- Finalizing legal regulations on business and protecting the domestic environment while observing regulations of international and regional organizations of which Vietnam is a member;

- Participating as a responsible member of the international community by honoring its international commitments and participating in bilateral and multilateral political and security cooperative mechanisms on the basis of respecting basic rules of international laws and the Charter of the United Nations; and

- Modernizing public administration to achieve strong administrative capability. This means an administration that has clearly defined responsibilities, is transparent, and able to respond quickly to change.


SEDS 2011-2020 focuses on three breakthroughs. They are:

- Completing the institution with focus on creating a fairly competitive environment and making administrative reforms.

- Rapidly developing human resources, especially high-quality ones, concentrating on the comprehensive renovation of the national education.

- Building a synchronous infrastructure system with a number of modern projects, focusing on traffic systems and infrastructure in large urban areas, etc.
The first and the third breakthroughs directly relate to trade facilitation. This indicates that the Vietnamese government is paying more attention to the advantages of trading by creating a fair and open economic environment for enterprises.

(iii) **Sectoral Strategies**

In addition, the government has approved a series of plans and strategies for developing infrastructure, managing cross-border trade and logistics business. These are developed at the sectoral level, with the result that there are a large number of plans and strategies that are not necessarily consistent one with another, and imply overlapping responsibilities. Nevertheless, four documents have a strong and direct influence on the trade facilitation process in Vietnam:

- **Vietnam’s Import-Export Strategy in 2011-2020 period and Vision to 2030.** This strategy promotes export growth while meeting domestic demand and enhances the comparative advantages of the economy, raising the effectiveness and competitiveness of imports and exports. It seeks to diversify import and export markets and proactively participate in the global production network and value chains. The strategy foresees an increase of 2020 export value of more than three times over 2010, bringing the average level of exports per capita to over US$2,000 and achieving a trade balance. It suggests several trade facilitation measures, including: (i) signing new agreements in compatibility and mutual recognition of product quality, facilitating favorable and stable circulation of exports; (ii) expediting development of commercial infrastructure facilities and information systems within border-gate areas and in connection with neighboring countries; (iii) upgrading transport infrastructure, warehouses and storage yards at seaports and customs clearance sites for imports and exports; and (iv) developing policies for logistics services development.

- **Customs Modernization Strategy in 2011-2020 period and Vision to 2030.** The key objective was to modernize Vietnam Customs by simplifying and harmonizing customs procedures towards international standards, applying information technology, introducing risk-based management in customs inspections, and introducing transparent, consistent, and predictable customs legal system. The strategy sets some targets that by 2015 e-customs procedures will be available in all provincial- and district-level Customs Departments and in key areas (international seaports, airports and road border gates and key economic regions), 60 percent of basic customs operations, 70 percent of import and export value, and 60 percent of enterprises. By 2020, the coverage of e-customs should be 100 percent of provincial- and district-level Customs Departments in all areas, 100 percent of basic customs operations, 90 percent of import and export value, and 80 percent of enterprises.

- **Transport Development Strategy in 2011-2020 period and Vision to 2030.** The strategy’s overall orientation is that by 2020, the country’s transport system will basically meet diversified domestic demands for transportation with rapid growth, improved quality and reasonable costs, with reduced traffic accidents and limited environmental pollution. It is, however, silent on trade competitiveness enhancement.

- **Overall Strategy on Development of Vietnam’s Service Sector in 2011-2020 period and Vision to 2030.** The strategy aims to effectively develop the service sector to international standards in terms of quality and competitiveness with high added value to serve the national industrialization and modernization, ensure sustainable development, and gradually shift to a knowledge-based economy. The strategy shows the development orientation of 10 services including logistics and transport services. It aims to make logistic services a key factor in accelerating the development of distribution systems as well as for domestic circulation of goods and import and export by forming integrated third-party logistics (3PL) and e-logistic services in association with e-commerce and effective and friendly supply chain management. The target is for the logistic market to grow at 20-25 percent per year. By 2020, the rate of outsourcing logistics will reach 40 percent.
In the field of transportation infrastructure alone, apart from above-mentioned major strategies, about 40 other strategies on national and local infrastructure have been formulated and promulgated. However, despite its stated importance, not much attention has been paid to developing the logistics business.

It is obvious that “trade facilitation” or “enabling trade” is not addressed systematically in the strategic planning process with clear long-term orientation supported by specific policies on trade facilitation. The concept of trade facilitation, often mistakenly referred to as concerning the regulatory framework of the export and import regime, may have only been implicitly recognized in the national strategy of socio-economic development. Similarly, the strategy for the development of infrastructure and transport service is silent on targeting trade competitiveness enhancement. The concept of commercial logistics is hardly mentioned in any of the strategies. There is a lack of vision by which the top priority of the national interests could be conceptualized and strategized so that harmonized efforts by many related trade facilitation stakeholders can focus on effective strategic planning. There is a need to have an appropriate institution to coordinate effectively a common and united orientation of trade facilitation with crosscutting issues through a well prepared and feasible national action plan. This will be discussed in the subsequent sections of this chapter.

7.2.2 The International Dimension

In line with Vietnam’s emphasis on trade as an engine of growth, the country has entered into a number of international agreements that have a material impact on how trade with other countries should be conducted. The most important of these are the rules under the WTO, which Vietnam joined in 2007, and ASEAN, which Vietnam joined more than a decade earlier (in 1995). This chapter reviews the provisions in these two organizations that are relevant to trade facilitation in Vietnam.

Trade Facilitation in the World Trade Organization

The WTO has no specific agreement on trade facilitation, but regulations on trade facilitation are in the GATT 1994 Agreement under Articles V on Freedom of Transit, Article VIII on Fees and Formalities connected with Importation and Exportation, and Article X on Publication and Administration of Trade Regulations. At present, WTO members are negotiating to give more concrete substance to these regulations. Negotiations are also aimed at strengthening technical assistance and capacity-building in trade facilitation as well as cooperation between customs and relevant authorities. Specific WTO regulations of WTO on trade facilitation are:

(i) Freedom of Transit

There shall be freedom of transit through the territory of each contracting party, via the routes most convenient for international transit, for traffic in transit to or from the territory of other contracting parties.

Any contracting party may require that traffic in transit through its territory be entered at the proper customs house, but such traffic coming from or going to the territory of other contracting parties shall be exempt from customs duties and from all transit duties or other charges imposed in respect of transit.

All charges and regulations imposed by contracting parties on traffic in transit to or from the territories of other contracting parties shall be reasonable, having regard to the conditions of the traffic. Each contracting party shall accord to traffic in transit to or from the territory of any other contracting party treatment no less favorable than the treatment accorded to traffic in transit to or from any third country.
(ii) Fees and Formalities Connected with Importation and Exportation

All fees and charges of whatever character imposed by contracting parties on or in connection with importation or exportation shall be limited in amount to the approximate cost of services rendered and shall not represent an indirect protection to domestic products or a taxation of imports or exports for fiscal purposes. No contracting party shall impose substantial penalties for minor breaches of customs regulations or procedural requirements. The above provisions shall extend to fees, charges, formalities and requirements imposed by governmental authorities in connection with importation and exportation.

(iii) Publication and Administration of Trade Regulations

Laws, regulations, judicial decisions and administrative rulings of general application, made effective by any contracting party, pertaining to the classification or the valuation of products for customs purposes, or to rates of duty, taxes or other charges, or to requirements, restrictions or prohibitions on imports or exports or on the transfer of payments for ex-imports, or affecting their sales, distribution, transportation, insurance, warehousing inspection, exhibition, processing, mixing or other use, shall be published promptly in such a manner as to enable governments and traders to become acquainted with them. Agreements affecting international trade policy which are in force between the government and a governmental agency of any contracting party and the government or governmental agency of any other contracting party shall also be published.

No measure of general application taken by any contracting party effecting an advance in a rate of duty or other charge on imports under an established and uniform practice, or imposing a new or more burdensome requirement, restriction or prohibition on imports, or on the transfer of payments, shall be enforced before such measure has been officially published.

During WTO entry negotiations, Vietnam has committed to comply with and implement the above provisions on facilitation after accession. Thus, Vietnam has committed itself to comply with all WTO provisions on transit, especially Article V of the GATT 1994 Agreement. Transit goods stored in bonded or customs warehouses must pay storage charges under the provisions of the MOF and the GDC. Transit goods stored in non-customs warehouse must pay the fees and charges for storage-service providers under the specific regulations of each provider. Also, customs procedures should ensure that they are not used as trade barriers and are in compliance with international standards of the Kyoto Protocol, including the standards of customs clearance, customs, tariff, and customs inspection. Likewise, all fees imposed by the customs on imports or exports should not create trade barriers and would be commensurate with services provided.

Trade Facilitation in APEC

APEC’s long-term goal was clearly stated in the 1994 Bogor Declaration as “free and open trade and investment in the Asia-Pacific region in 2010 for developed countries of APEC and in 2020 for developing countries of APEC.” To accomplish this goal, the activities of APEC cover trade liberalization and investment, trade facilitation, and economic and technical cooperation. Trade facilitation focuses on reducing business costs and enhancing information exchange and trade liberalization. It encourages exporters in the Asia-Pacific region to have meetings and do business more efficiently, helping to reduce production costs, thereby leading to increased trade, cheaper and better goods and services, and more employment opportunities.

To help trade facilitation, member economies carried out a Collective Action Plan covering 15 areas -- tariffs, non-tariff measures, services, investment, standards and conformance, customs procedures, intellectual property, competition policy, government procurement, deregulation/regulatory review, WTO obligations (including rules of origin), dispute mediation, mobility of business people, the Uruguay Round, and information gathering and analysis.
APEC members also developed and implemented the first Trade Facilitation Action Plan (TFAP1) to reduce transaction fees in APEC by five percent between 2002 and 2006. TFAP1 is carried out on four areas, namely customs procedures, standards and conformance, electronic commerce, and mobility of business people. Following TFAP1, APEC members developed the Second Trade Facilitation Action Plan (TFAP2) to further reduce transaction fees by another five percent by 2010. Key Performance Indexes (KPIs) were developed to measure how these targets are achieved.

In relation to TFAP, Vietnam had committed itself to harmonizing customs procedures in compliance with international regulations and rules, especially with respect to requirements and provisions of agreements on customs procedures in the WTO. Vietnam has also committed itself to participate in international agreements on standards and conformance, harmonize national and international standards, and participate in mutual recognition arrangements on quality standards, especially in agriculture, industry and electronic products, with the purpose of creating the most favorable conditions for trade and investment among member economies and support for the multilateral system of global trade. In electronic commerce, Vietnam is completing legal documentation on paperless trade, gradually extending to the deployment of e-customs procedures and a national single window regime in 2012, so as to approach APEC's Paperless Trade Goal by 2010 for the developing countries. To enhance the mobility of business, Vietnam has been actively involved in implementing the program of APEC Business Travel Card (ABTC) to create favorable conditions for the mobility of business people in the region, in coordination with other APEC members to implement cooperation programs on immigration.

Trade Facilitation in the ASEAN Europe Meeting (ASEM)

The Asia - Europe Meeting (ASEM) was officially established in 1996 between the members of the European Union and the ASEAN Plus Three Grouping at its first summit in Bangkok. The common framework for the TFAP was approved by heads of state at its second summit (ASEM II) in 1998.

This program is the foundation of ASEM cooperation today. The main goal of TFAP is to facilitate the exchange of trade in goods and services between the two regions. To reach this goal, TFAP was built as a catalyst and a common framework for countries to render trade management policies transparent as well as harmonize and simplify administrative procedures related to trade. In addition to seven priority areas, namely standards and conformity assessment, quarantine and SPS procedures, customs procedures, intellectual property rights, public procurement, distribution, and mobility of business people, this TFAP is currently focusing on identifying non-tariff barriers (NTBs) to trade among ASEAN countries.

TFAP is non-discriminatory and is applied to both member and non-member states of ASEM. Additionally, TFAP activities must be consistent with, support and promote bilateral and multilateral trade facilitation activities. Its priorities are resolving unsolved issues using the most effective approach. ASEM’s TFAP encourages the participation of businesses, especially small and medium enterprises, the main target group of this program. Vietnam has been involved in the development and implementation of TFAP. It and other ASEAN members have developed a list of common barriers to trade as the priority areas for TFAP.

Trade Facilitation in ASEAN

Given the regional importance of ASEAN, it is expected that Vietnam’s trade facilitation commitments to this regional group is the most extensive. Vietnam and ASEAN members signed several agreements, treaties and programs on trade facilitation:

- ASEAN Trade in Goods Agreement
- ASEAN Customs Modernization
- ASEAN Single Window
TRADE FACILITATION, VALUE CREATION, AND COMPETITIVENESS

- Mutual Recognition Arrangements in ASEAN
- Harmonization of Standards & Technical Regulations

**ASEAN Trade in Goods Agreement (ATIGA)**

ASEAN Trade in Goods Agreement (ATIGA) is the first comprehensive agreement of ASEAN that covers the entire trade of goods and is developed on the basis of commitments agreed to in the CEPT/AFTA (Common Effective Preferential Tariff/ASEAN Free Trade Area) and other related agreements and protocols. The goal is to facilitate free flow of goods within ASEAN so as to establish a single market and production base and realize the ASEAN Economic Community (AEC) by 2015.

*ATIGA entered into force in May 2010.*

It consolidates and streamlines all the provisions in CEPT–AFTA. It stipulates the tariff rates to be applied on a list of products for each year up to 2015. It also contains clauses on removal of non-tariff barriers, rules of origins, trade facilitation, customs, standards and conformance, and safe sanitary and phyto-sanitary measures. Implementation mechanisms and institutional arrangements are also detailed. Trade facilitation is emphasized by including the ASEAN Framework on Trade Facilitation.

Vietnam’s tariff reduction commitments under ATIGA are made under CEPT/AFTA. This means that on January 1, 2015, most of Vietnamese trade with ASEAN will not be subject to tariffs, although a few tariff lines will be maintained until 2018. In compliance with ATIGA terms, on November 17, 2011, the Ministry of Finance promulgated Circular No. 161/2011/TT-BTC on special preferential import tariffs for the period of 2012-2014. This Circular entered into force on January 1, 2012.

**ASEAN Customs Modernization**

The customs administrations in the ASEAN member states have begun to accelerate modernization of their systems. With these objectives in mind, the Strategic Program of Customs Development (SPCD) stipulates the release of any containerized shipment to thirty minutes. ICT applications have been introduced in the customs clearance of goods in all Member States in accordance with international standards. This has contributed to reducing both the time required for release of shipments from customs control and processing costs. The customs administrations are also working in partnership with industries and businesses to strengthen and improve the level of service and compliance.

ASEAN, including Vietnam, has launched a number of initiatives. Thus, ASEAN customs administrations adopted the ASEAN Customs Vision 2015 at the 17th Meeting of the ASEAN Customs Directors-General in Laos in June 2008. Substantial progress has been achieved in reviewing the ASEAN Agreement on Customs (1997) to support the realization of the ASEAN Economic Community. New provisions enable ASEAN customs practices to align to international conventions and standards such as the Revised Kyoto Convention, WTO Agreement on Customs Valuation, and the implementation of the World Customs Organization SAFE Framework of Standards. Member States have implemented the ASEAN Harmonized Tariff Nomenclature 2007/1, which is fully aligned to the Harmonized Commodity Description and Coding System 2007.

**ASEAN Single Window (ASW)**

The ASW is to simplify and harmonize foreign trade arrangement among ASEAN, with the aim that enterprises report information for customs clearance only once. This means, in effect, the development of a mechanism for sharing information among customs agencies. The Agreement on establishing and implementing the ASW Agreement was signed on September 9, 2005. A comprehensive framework agreement for the ASW is being developed.
Vietnam has approved a National Single Window (NSW) Master Plan and is carrying out activities such as reviewing and generalizing the legal framework, information technology system and operation procedure, seeking resources, and undertaking technical assistance projects to implement the NSW. The Prime Minister's Decision No. 48/2011/QD-TTG dated August 31, 2011 approved the pilot application of the NSW mechanism for the period 2011–2014. The General Department of Vietnam Customs also mobilized, received and implemented USAID's sponsored projects on the analysis of legal gap and activities supported by the United States Trade and Development Agency and the Multi-donor Trust Fund Phase 2 Project.

**Mutual Recognition Arrangements (MRAs)**

Mutual Recognition Arrangements (MRAs) are agreements made between two or more parties to mutually recognize or accept some or all aspects of one another's conformity assessment results. MRAs can help reduce business cost on test reports and increase the certainty of market access for products.

The ASEAN Framework Agreement on Mutual Recognition Agreements, signed in 1998, has provided a framework for ASEAN countries to conclude MRAs in different sectors. To date, two sectoral MRAs, namely in the electrical and electronic sector and the cosmetics sector, have been concluded. Further, ASEAN member states agreed to develop the ASEAN Electrical and Electronic MRA (ASEAN/EE MRA) to reduce costs and testing time for electrical and electronic goods traded in ASEAN. This MRA covers electrical and electronic equipment that is connected to low-voltage power supply except telecommunication equipment and health equipment.

Vietnam has officially participated in two MRA agreements on Architectural Services and Technical Consulting Services. On March 21, 2008, the Government issued Dispatch No. 1802/VPCP-QHQT on guiding related Ministries and Branches to implement this agreement via a board of supervision for the implementation of the agreement.

**Harmonization of Standards and Technical Regulations**

Work on harmonizing standards began with the identification of 20 priority products in 1997. As a result, 58 standards for electrical appliances and 3 standards for rubber-based products sector were harmonized. ASEAN has also harmonized the technical regulations for cosmetics and the electrical and electronics sector. The ASEAN Harmonized Cosmetic Regulatory Scheme was signed on 2003 and the ASEAN Harmonized Electrical and Electronics Equipment Regulatory Regime was signed on 2005. The harmonization of technical regulations is underway for base products, automotive, medical devices, traditional medicine and health supplement sectors.

Vietnam has been proactive in formulating, negotiating, approving, making commitments and implementing rules on trade facilitation and logistics as a part of international agreements. The combined impact of signing and observing these bilateral and multilateral agreements has been to foster an institutional environment for enhancing trade facilitation and logistics between Vietnam and other members of the international community. At the same time, how much of all these actions are translated into improvements in trade facilitation is uncertain. The outcome of negotiations remains to be seen. Even the commitments have yet to be translated into actions. Vietnam’s effectiveness in implementing those rules depends on the efficacy of the institutions at the second and third tiers in Figure 7.1. The legal and regulatory framework and institutions of the third tier were examined in Chapter 4, Chapter 5, and in particular Chapter 6. The next section will focus on the organizational structure of institutions dealing with trade facilitation in tier 2. This is material to how effectively tier 3 level institutions function.
7.3 The Organizational Framework

Currently, Vietnam does not have any agency in charge of general activities of trade facilitation. Trade facilitation management is implemented separately between ministries and branches. Limited effectiveness is reflected in weak coordination not only in terms of policy making and implementation, but also among governmental offices involving trade facilitation and between management bodies and associations, enterprises and international organizations.

The following ministries and branches are important with regards to the three trade facilitation pillars classified in Chapter 1.

- **Transport Infrastructure Development Management**: The governing body is the Ministry of Transport (MOT), which is responsible for developing, upgrading, and implementing transport infrastructure plans to meet the industrialization and modernization needs of the country. Its key functions include state management on roads, railways, rivers, marine and air transportation nationwide, state management on public services and acting as representative owner of State's capital in state-owned enterprises under the Ministry pursuant to the law. The Ministry does not have a body in charge of tracking integration of transport infrastructure development orientation with aim of creating favorable conditions for export-import activities;

- **Border Management**: The governing body is the Ministry of Finance (MOF) through the General Department of Vietnam Customs (GDC), which plays a key role in providing state management effectiveness for exports and imports by simplifying customs clearance procedures at border gates. Its key functions include state management in the fields of finance, accounting, independent auditing and price nationwide; state management on public services in the fields of finance, including budget, customs, accounting, independent auditing and price; and acting as representative owner of State's capital in state-owned enterprises. There are some shortcomings, however, in the customs management system as well as cooperation with related trade facilitation bodies. The main function of Vietnam Customs remains revenue collection and this shows the primary relationship between Customs and its line ministry, MOF. This function has nothing to do with trade facilitation, and therefore the leadership role of MOF in trade facilitation is limited.

- **Trade Logistics**: The governing body is the Ministry of Industry and Trade (MOIT), which is responsible for ensuring policy environment for and supervising export and import as well as logistic service activities. Its key functions include state management on industry and trade: mechanics, energy, domestic commodity circulation; import–export, market management, trade promotion, commercial services, international economic–trade integration, competition management, and monopoly control, etc. The legal framework is still limited. Perceptions and policy framework of supply chain organization in relations to export and import activities are still underdeveloped. The supply chain organization needs to have cooperation with Ministry of Transport and other related line ministries in planning and developing transport infrastructure.

- **Supply Chain Organization**: Three key ministries are responsible for managing supply chains: the Ministry of Industry and Trade, the Ministry of Agriculture and Rural Development, and the Ministry of Planning and Investment.

While ministries and branches have responsibilities for state management in specific areas, there is no formal avenue of co-operation between ministries and branches in implementing general targets and orientations for trade facilitation, or for strengthening the export competitiveness.
Many other line ministries play important roles in the trade facilitation process in Vietnam. They include the Ministry of Agriculture and Rural Development, Ministry of Planning and Investment, and the Ministry of Resources and Environment. The complexity of the trade facilitation concept makes it difficult to define the responsibilities, functions and powers of management bodies in charge of trade facilitation. The promulgation and implementation and even, as noted earlier, formulation, of strategies on trade facilitation is decentralized. Decentralization takes two forms — horizontal decentralization with ministries and their branches undertaking management and implementation in their respective areas of responsibility, and vertical decentralization from the central ministries to lower levels of government.

**Horizontal Decentralization**

Ministries are often assigned to draft respective strategies for their fields and sectors: the Ministry of Industry and Trade on trade, services and industry, the Ministry of Transport on infrastructure, and the General Department of Customs (Ministry of Finance) on cross-border importing-exporting activities. The main ministries responsible for trade facilitation are described at the beginning of this section. Therefore, strategies on trade facilitation are often compiled and promulgated by ministries independent of one another. Not only does Vietnam not have a body or mechanism to coordinate these activities, but ministries and their branches have overlapping authority and responsibilities in many areas. These issues are obstacles to the materialization of strategies on trade facilitation.

**Vertical Decentralization**

While horizontal decentralization affects the efficacy of strategy formulation, vertical decentralization has a significant influence on implementation of strategies because lower levels of government are responsible for implementation. Based on the strategies approved, each locality has the authority to make decisions on activities in their own geographic jurisdictions. Regulations set by localities are independent of one another but apply only within their jurisdictions. However, the overlapping authority and responsibility among ministries and their branches often cause difficulties in managing and instructing localities in the deployment of the strategy at grassroots level. However, as there has not been a general national orientation on trade facilitation, the management and development of trade facilitation in each locality is often local, asynchronous and inconsistent.

Currently, there have not been mechanisms related to trade facilitation in Vietnam. However, there are two interdisciplinary economic mechanisms in general, which have the potential to monitor trade facilitation. These two mechanisms are the National Council on Sustainable Development and Competitiveness Enhancement and the National Committee for International Economic Cooperation:

**The National Council for Sustainable Development and Competitiveness Enhancement**

The Prime Minister issued Decision No.641/QĐ-TTg dated May 31, 2012 to approve the operational mechanism of the council. The council has responsibility for counseling Government and the Prime Minister to direct two main tasks, which are building and implementing strategies, policies, programs, tasks and solutions to implement sustainable development and competitiveness enhancement; and supervising implementation of strategies, policies, programs, duties and activities on sustainable development and competitiveness enhancement.

The council, chaired by a Deputy Prime Minister, consists of four specific committees, especially the committee on economic sustainable development and competitiveness enhancement held by the Minister of Planning and Investment. The council gives yearly reports and recommendations on sustainable

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45 Currently Mr. Nguyen Thi Nhan.
development and competitiveness enhancement. The council submits the national report on sustainable development and competitiveness enhancement to the Prime Minister every three years. In some necessary cases, the president of the Council will ask the specific committee to submit the report for the Prime Minister. The Ministry of Planning and Investment was appointed as the standing member of the council.

At the first session of the council dated July 19, 2012, the chairman gave directions on competitiveness enhancement. Accordingly, competitiveness capacity enhancement of Vietnam is considered to be very urgent. The council asked the Ministry of Planning and Investment to finish compiling regular reports and competitiveness indices of Vietnam by 2015, collected opinions from related partners and obtained technical assistance from international organizations such as the World Bank (WB) and the World Economic Forum (WEF).

National Committee for International Economic Cooperation

Currently, NCIEC is operated in accordance with Decision No.174/2007/QĐ-TTg dated November 19, 2007 on consolidating the committee. NCIEC, chaired by another Deputy Prime Minister (Mr. Vu Van Ninh), was established to help the Prime Minister direct and combine economic integration activities of Ministries, agencies and provincial people’s committees and cities under the central government with countries, territories and multilateral organizations. At present, NCIEC has been consolidated towards researching and proposing policies on international economic integration to the Prime Minister.

Trade facilitation is supported by many ministries, agencies, private and public sector and requires coordination. Moreover, trade facilitation is a part of competitiveness capacity enhancement, thereby increasing integration capacity into the global economy. The functions of the above organizations renders either appropriate for monitoring trade competitiveness and trade facilitation. The Committee on Sustainable Development and Competitiveness Enhancement has responsibilities for counseling the Government and the Prime Minister to direct building and implementing policies and programs on trade competitiveness as well as supervision and reporting of progress and implementation of these policies and programs. NCIEC has the advantage of considerable experience in monitoring many interdisciplinary issues and building economic policies of Vietnam such as bilateral and multilateral trade agreements, strategies and programs on economic cooperation.

However, the selection of either organization or establishing a new organization to be in charge of trade facilitation should be considered carefully. This chapter concludes with recommendations for an appropriate mechanism regardless of whether it is under these organizations or a new organization.

7.4 Conclusions and Recommendations

Although trade facilitation is receiving strong support from the leadership and is incorporated in policy statements, the country’s institutional capacity has not been able to translate policy into effective action. There are a number of reasons for this.

First, at the policy level, there has been neither a uniform approach to nor common understanding of trade facilitation and its important role. This is because in the many documents in which this subject is discussed, trade facilitation is considered to be just one of many ways, rather than as a decisive factor in enhancing the competitiveness of Vietnam’s export. Nor have there been common and consistent guidelines on trade

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46 Vietnam’s import-export strategy for 2011-2020 and vision to 2030 contain many proposals to enhance exports, but trade facilitation has not been given much emphasis.
facilitation. Vietnam has neither had an inter-sectoral coordinative agency for trade facilitation nor regulations requiring ministries to do so. For this reason, there has not been any coordination among ministries and branches in implementing programs and policies on trade facilitation.

Second, while Vietnam has a common policy for development, it lacks concrete programs and methods of implementation. For example, guidelines on proactive international integration and negotiations to join FTAs are often slow to take shape after an overall strategy with appropriate roadmap has been agreed upon. This situation results in many enterprises having no investment strategy to develop supporting industries. Some localities and enterprises, unaware of opportunities offered by international economic integration, have not been able to take advantage of opportunities integration offered. Meanwhile, countries that have signed six regional FTAs with Vietnam have made use of this opportunity to boost exports to Vietnam. In particular, in the FTA relation with China, Vietnam has not made suitable use of opportunities and overcome challenges in implementing integration commitments, resulting in disadvantages in both imports and exports. In seven years of implementing EFH/ACFTA, the proportion of imports from China in the total import value of Vietnam rose by 1.63 times to 23.6 percent in 2010 from 14.37 percent in 2004. During the same period, the proportion of imports from Vietnam in the total import value of China decreased from 0.54 percent to 0.49 percent.

Third, because of challenges facing the institutional framework discussed previously, the business environment in general and import-export environment in particular has been slow to improve. This is reflected in various global indices like the Index of Economic Freedom, the Global Competitiveness Index, as well as the World Bank’s Doing Business Index.

Fourth, the infrastructure for developing commodity import-export and logistics services remains outdated, weak, uncoordinated and unable to keep pace with the high growth of trade. The overloading at seaports, limited logistics and loading capacity and complicated administrative procedures prolong the time for customs clearance, raising costs as well as reducing competitive capacity and import-export efficiency. Many import-export services must be hired or purchased from outside. This is also the reason for the increase in service deficit, resulting in high trade deficit.

Fifth, although not so much a consequence but a cause of institutional deficiencies, Vietnam lacks the capital and other crucial resources to implement its strategies. The current state budget is tightly controlled, with overspending being prudentially restricted to no more than five percent and with total public debt targeted to be below 65 percent of GDP by 2015, according to the Socio-economic Development Plan 2011-2015 approved by the National Assembly. However, planned infrastructure development under the Plan, including road expansion in Ho Chi Minh City, will require resources equivalent to nearly 50 percent of Vietnam’s 2015 GDP. In Ha-Noi, the State budget can cover only 20 percent of the total infrastructure construction planned. However, the mechanisms and policies to mobilize other extra budgetary funds from sources including foreign are only indicatively spelled out.

Finally, and again a cause of limited institutional capacity, high-quality human resources with technological and foreign language competences needed for project planning and implementation are in very short supply. As a result, the capacity for forecasting domestic and international situations remains limited.

47 In official documents, trade facilitation has just focused on the stages of customs, infrastructure development and transportation services. Activities related to strengthening logistics did not receive much attention. The asynchrony in developing trade facilitation pillars reflects the loose connection in realizing the common objective in trade facilitation among ministries and branches.
48 Many countries, like China and Thailand, have specialized agencies in charge of trade facilitation and infrastructure as a means of enhancing export competitiveness.
49 In 2005-2007 period, Vietnam had to pay up to US$6 billion to other countries for insurance premiums and logistics, accounting for 35.7 percent of the total service costs in the same period.
Qualifications of staff formulating strategies and undertaking development planning are not high, resulting in targets that need revision. The capacity for devising and implementing policies has been inadequate to effectively leverage the benefits of broad and deep international integration. Vietnamese trading enterprises are mainly SMEs, lacking management and skills to engage in international business.

Broadly speaking, Vietnam does not lack policies, plans and projects but they are uncoordinated or even contradictory, and rarely based on factual data. Consultancy from experts and individuals outside the government does not receive adequate attention. Vietnam should have an organization in charge of managing and coordinating other organizations in building and planning policies as well supervising, checking and evaluating effectiveness, overlapping or suitability of the policies. Moreover, supervision and assessment of policy effects should be implemented systematically. Skilled staff and government agencies coupled with effective organizational structure and management mechanism are vital conditions for government to operate more efficiently. The government should improve the competitiveness capacity of provinces based on their advantages and natural position through engagement among provinces and development of local industrial and agricultural clusters. However, this policy should be built on a consistent national action plan in which the national interest of enhanced competitiveness should take precedence over any local or individual interests. It requires a more effective decentralization structure in Vietnam.

Implementation of international commitments of Vietnam on trade facilitation (Figure 7.1) is one way to improve trade competitiveness. Vietnam's commitments within FTAs help to implement internal reforms of Vietnam, which include institutional reform. In order to implement these commitments effectively for trade facilitation, the government should continue to build and complete legal system and policies to implement international commitments.

Vietnam must build a comprehensive policy on trade facilitation, instead of leaving parts of the process under the responsibility of different agencies without formal coordination. A clear vision should be established to address Vietnam's lack of a common and united orientation of trade facilitation. Interdisciplinary coordination in implementing strategies and policies of trade facilitation should also be strengthened. A medium-term national action plan should be developed to deal with these problems and increase its national commercial competition capacity. This should be based on a solid analytical framework of trade facilitation, covering three major pillars: transport infrastructure, logistics service and supply chain organization, and cross-border trade regulations. A clear timetable and assignment on who will do what, coupled with sufficient organizational structure for effective coordination, are essential for successful implementation of the action plan.

It is suggested, as shown in Figure 7.2, to appoint a national-level body in charge of policy coordination to ensure uniform and effective implementation of policies on trade facilitation. Such a National Committee for Trade Facilitation should cover the following terms of reference. First, it should effectively coordinate ministries and agencies, provinces and PPP projects in formulating and implementing strategies, plans and ideas, innovations related to trade facilitation. The Committee will mobilize necessary financial and technical resources to implement these strategies, plans and ideas, innovations.

Second, the national committee should supervise the trade facilitation process in Vietnam from policy formulation to implementation. In particular, the Committee will supervise the implementation of activities, proposal of the programs related to trade facilitation. The committee should be able to have authorization and capacity to request and receive necessary information from related government agencies to propose appropriate policies and legislative documents on trade facilitation.
Third, the committee should be able to report to governmental agencies and people on progress and outcome of implementing trade facilitation programs including updating, reviewing, assessing the implementation of programs and organizing events, conferences on trade facilitation or publishing annual research and reports on Vietnam’s trade facilitation.

In order to discharge its role, the committee should include members who are leaders of governmental agencies. Businesses, in particular from the private sector, should have representatives on the committee. It is recommended that the Committee be led by the Prime Minister. The Committee must be divided into teams each in charge of one or more areas. The committee will have secretariat with experts and leading stakeholders in related areas. The secretariat has responsibility for reporting directly to leaders of committee. The committee must have an autonomous budget for its operations.

Trade facilitation involves numerous government ministries and agencies that have a specific regulatory role to discharge. The objective of the Committee is to bring disjointed stakeholders together with common purpose of facilitating trade. The Committee provides a platform to discuss and suggest an appropriate course of action to the line ministries and agencies. It provides a forum for government agencies and the business sector to build consensus on broad and specific facilitation measures for collective and individual actions.
Box 7.1: International Experience in National Mechanisms for Trade Facilitation Coordination

The National Development and Reform Commission of China (NDRC)
The National Development and Reform Commission (NDRC) is a macroeconomic management agency of China under the State Council, which has broad administrative and planning control over the Chinese economy. The Commission consists of twenty-eight functional departments/bureaus/offices with over 1,000 staff. The principal functions of NDRC include dealing with formulating and implementing strategies for national economic and social development, medium-term and long-term programs, annual plans, price policies and comprehensive industrial policies. The Committee also coordinates institutions in the economic and social development of national major issues (for example, restructuring of China’s economic system). NDRC has been at the forefront of the country’s economic development and initiative of reform and opening up, especially with the transition from the planned economy to socialist market economy. Another principle function of NDRC is to submit the plan for national economic and social development to the National People’s Congress on behalf of the State Council in accordance with the Constitutions.

Malaysia Logistics Council (MLC)
The services sector, including logistics has been targeted as the engine of growth under Malaysia’s Third Industrial Master Plan (IMP3). To give more focus on the logistics industry, the government set up the Malaysia Logistics Council (MLC) in February 2007 to be the focal point for the overall coordination on strategies, policies, regulations and rules for the logistics sector. The Council provides the leadership and serves to address all issues relating to the development of the industry; monitors and coordinates the implementation of programs and activities of the respective Ministries and Agencies/Authorities at both Federal and State levels; and is involved in the development of the industry. The setting up of the MLC is a positive beginning, but needs to be strengthened. Although the Council represents the respective players, this arrangement has not yet reached the point of productive mutual trust.

8.1 Introduction

This chapter discusses key policy priorities arising from the analysis in previous chapters. This analysis reveals major challenges to Vietnam’s export competitiveness but also suggests directions for policy to overcome these challenges. These priorities, together with needed actions and their expected outcomes, are elaborated here and brought together in a policy matrix. This policy matrix provides a summary of proposed policy guidelines that are useful for policy-makers as they develop a national action plan for enhancing trade competitiveness. The key assumption is that trade performance is increasingly an issue of competitiveness rather than simply market access. However, this does not mean that other areas of competitiveness are less important.

Many opportunities remain for Vietnam to grow its exports and strengthen its competitiveness. This study has focused on enhancing trade competitiveness through strengthening domestic export-related infrastructure, both physical and regulatory. A central part of this discussion focuses on restructuring to enhance the effectiveness and efficiency of supply chains of key export goods.

8.2 Policy Priorities and Key Strategic Actions

The policy priorities, together with specific actions needed, are distilled into several key messages.

Message 1 - Build a Sound Policy Framework and Institutional Capacity to Implement the National Action Plan for Trade Competitiveness Enhancement

National Action Plan (NAP)

Vietnam suffers not from the lack of a policy framework, but too many, none of which directly address the country’s trade competitiveness. However, in addition to SEDS 2011-2012, Vietnam currently has more than 40 strategies related to export-related production and trade activities. While trade is highlighted as
important for economic growth, technology transfer, and job creation, trade competitiveness has been rarely mentioned throughout the relevant strategies. A conceptual framework is lacking in which key determinants of trade competitiveness are explicitly identified so that policy priorities can be set out.

The recommendation is not to develop a new strategy, but construct a single National Action Plan (NAP) for trade competitiveness, built on the existing related strategies. To be effective, the policy must build on a comprehensive diagnosis of constraints to formulate and implement prioritized policy actions, and with adequate supporting resources. The NAP should reflect a clear vision aligning an export-led growth model to the changing global and domestic context. Analyses provided in Chapter 1 and Chapter 2 suggests that this requires focus on enabling trade and capturing higher value addition. Achieving this goal should help gradually address the current serious trade deficits. At the same time, planned diversification of both exports and imports in terms of products, as well as sources of imports and destinations of exports, will help reduce Vietnam's vulnerability to trade shocks.

The cross-cutting nature of trade competitiveness issues demands much stronger policy coordination capacity. Chapter 1 emphasized a key challenge for Vietnam's future competitiveness prospects in the form of multiple policy levers in trade logistics and facilitation, whose complexity, urgency, and sequencing (reproduced in Figure 8.1) limit policy effectiveness.

In addition, new areas of intervention to improve cost-effectiveness in the movement of goods, such as the quality of logistics and trade supporting services, and border management coordination, have become important. From infrastructure upgrading to private sector development, this diverse agenda will require substantial coordination to carry out this diversified set of actions. Dealing with weaknesses in this new integrated framework should be at the forefront of the country's competitiveness agenda reflected in the NAP.

**Figure 8.1: Key Policy Levers to Enhance Performance**

Source: Authors
Ensuring Better Coordination among Policies to Enhance Export Competitiveness

Given the above, the current institutional arrangements for national policy coordination in driving national competitiveness should be strengthened to ensure not only a high quality NAP but also its successful implementation. The National Committee for trade facilitation has a vital role to play, and its terms of reference should be modified appropriately to ensure effectiveness. The coordination body should not be just an advisory agency functioning on an ad-hoc basis, but a regular institution supported by a competent secretariat with full-time and staff.

Coordination implies the importance of selectivity and sequencing of policy actions, given the size and complexity of the trade competitiveness agenda and limited human resources. This includes appropriate selection of strategic industries to be given priority in support of a likewise sequenced industrialization process. It is intended to ensure a clear future export portfolio and plan on restructuring the structure of its supply chains to capture value added.

Linking Trade Competitiveness to Industrial Policy

Of particular relevance to trade competitiveness is Vietnam’s industrialization strategy. Although the efficacy of industrial policy remains controversial, the East and Southeast Asian economies that successfully industrialized before Vietnam deployed a range of industrial strategies. These include combining policies for picking winners with leapfrogging by Korea, evolutionary targeting and path creating in Taiwan (China), multi-mode with policy experimentation in China, and FDI leveraging in Malaysia. While some strategies adopted by early starters like Korea and Taiwan (China) are no longer available because of the application of TRIMS under WTO rules, there remain many pathways from which Vietnam can draw lessons as it charts its own industrialization path. In doing so, it needs to recognize two major short-term constraints—the underdeveloped institutional capacity for innovation and low human capital base, both of which are the foundations for development—that Vietnam, and indeed, many developing countries, currently faces. The building up of both is a medium- to long-term endeavor. In the short-term, an alternative strategy that capitalizes on the country’s existing comparative advantage while extracting greater value added is needed.

Exploiting Vietnam’s Existing Comparative Advantage

Vietnam’s current comparative advantage comes partly from being located in a dynamic region where China is emerging as an increasingly dominant player in both regional and international trade. For Vietnam and its Southeast Asian neighbors, this dominance comes both from its being the final point of global supply chains and from its drive to achieve high economic growth. This drive has been fueled by exports, but with the recent global financial crisis, it has begun to focus more on producing for the domestic market. At the same time, China intends to hone its competitiveness by moving up the technology ladder and simultaneously boosting value addition of its exports. This would open up opportunities for other export-led growth economies, including Vietnam, especially in markets for low technology, labor intensive manufactures (mostly apparels and footwear). But as previous chapters argue, this will depend on Vietnam’s competitiveness given the fact that Vietnam is not alone in possessing such comparative advantage.

Leveraging existing comparative advantage permits Vietnam to focus on its existing major exports, while nurturing new dynamic sectors. An example is the electronics and electrical devices sector, which has powered technological learning throughout Asia. In pursuit of this strategy, several priority industries with targets and prospects have been selected for three periods -- 2007-2010, 2011-2015, and 2016-2020 -- under Decision 55/2007/QĐ-TTg dated April 23, 2007 (Table 8.1). The question is whether the selection of these industries has been based on comparative advantage.

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50 The Agreement on Trade Related Investment Measures (TRIMs) are rules that apply to the domestic regulations a country applies to foreign investors, often as part of an industrial policy.
Despite the promise of high-tech electronics, Vietnam’s comparative advantage “is still largely based on the country’s endowments of labor and natural resources.” (Le 2010: 221). This is borne out by the very sizable contribution of rice and coffee to Vietnam's total exports, as well as the importance of garments and footwear among manufactured goods exports. The focus now should be on how to raise value added for the exports of these commodities while gradually building up high-tech capabilities. The government’s priority industries reflect this comparative advantage to a degree, but also emphasize industries like steel, chemicals, plastics, and alternative energy.

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<thead>
<tr>
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<tbody>
<tr>
<td>Textile and garment (yarn, fabrics, silk, exported clothing, raw materials and auxiliary materials)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Leather and footwear (exported footwear, raw materials and auxiliary materials)</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<tr>
<td>Plastics (domestic-use plastics, packings, bottles, jars, pipes, etc., technical plastics)</td>
<td>✓</td>
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<tr>
<td>Processing of agricultural, forest and aquatic products</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Steel (steel draft, special-use steel)</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Exploitation and processing of aluminum bauxite</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemicals (base chemicals, fertilizers, petro-chemistry, pharmaco-chemistry, cosmetics)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mechanical engineering (automobiles, ship building, complete equipment, agricultural machines and mechanical electronics)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Electronic, telecommunications and information technology equipment</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Products from new technologies (new energy, renewable energy, software industry, digital content)</td>
<td>✓</td>
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Source: Decision 55/2007/QĐ-TTg.

These selected industries benefit from incentive policies on land, trade promotion and research and development. In addition to the benefits given to priority industries, spearhead industries are also being provided support in covering part of the environmental protection costs. Textiles and garments, footwear, processing of agro-forestry-fishery are considered priority industries whilst electronics is considered a spearhead industry up to 2020. Plans are being developed to support priority industries to attract investment and construct production premises. Supply chain development for prioritized industries is highlighted in these plans.
Policies to support industrial priorities should be neutral or immune from vested interests. National competitiveness and interests should constitute the top selection criterion and policy tools to support prioritized export-led industrialization should take into account long-term benefits. An example is the set of policies to strengthen export-related infrastructure, both in terms of physical and institutional aspects. Risks associated with side effects of the policies, which in many cases deal with short-term and direct supports, should be minimized, in particular in the context of Vietnam’s commitments with the WTO's principles and agreements.

**Message 2 – Develop Infrastructure and Transport Services to Improve Domestic Production Linkages and International Connections for Export Growth**

Chapter 3 indicates that transport infrastructure and logistics services are among the weakest areas of Vietnam’s trade logistics system. It highlights the fact that despite being a large market, Vietnam's potential has been severely compromised by its weak connectedness. Among major constraints of transport infrastructure, Chapter 4 emphasizes the investment gaps. Over the past 15 years, while freight transport has been growing on average 21.1 percent, and trade at 18 percent, there was no growth in investment in transport infrastructure. The current level of annual transport infrastructure investment based on statistics during 2009–2011 is 3.1 percent, below the average for countries that have the same level of development as Vietnam. To date, almost all the investments in transport infrastructure are sourced from the state budget, including ODA financing. Vietnam, therefore, has been over-reliant on public investment, which has been found to be "unaffordable, inefficient, and therefore unsustainable", according to the World Bank’s Vietnam Development Report, 2012.

**Public Private Partnership**

This reality points to the urgency of a policy framework to mobilize resources from outside the state budget for transport infrastructure investment. The government therefore has to shift as quickly as possible from sole reliance on public investment to incorporate private sector sources of financing investment in infrastructure through appropriate Public-Private Partnership (PPP) tools.

This is more critical if Vietnam were to realize its target of tripling its current export value by 2020. Moreover, there is potential for Vietnam’s ports to act as gateways to Cambodia and Laos, and China’s inland southern provinces. Becoming a regional trans-shipment logistics hub could bring enormous benefits for the Vietnamese economy. However, achievement of this objective hinges on effective coordination between transport investment and trade competitiveness.

**Improving Corridors and Access to Main International Gateways**

Even if Vietnam could mobilize sufficient sources of finance for transport investment, the master planning mindset would have to change drastically. As indicated in the previous section, clear connections between investments in transport infrastructure and trade competitiveness must be explicitly recognized. Since the state budget will remain the major source of investment at least in the short-term, the public investment regime will need to be urgently improved to enhance investment efficiency. Of particular importance is the prioritizing of investment activities to strengthen trade competitiveness. Among several main constraints described in Chapter 4, weak corridors providing to access to main ports are of the most concern. It is recommended that it is a priority to build efficient and effective transport corridors for HCMC and Hai-Phong port complex, in particular transport corridors for Cai-Mep ports in Ba-Ria – Vung-Tau by widening NH51. It is also recommended to provide good connections to container terminals and build a railway connection parallel to NH51 to increase capacity and connectivity and develop connectivity to inland waterway corridors in the Mekong Delta.
Strengthening the Logistics Strategy

Logistics services are primitive in Vietnam, and the awareness of logistics services is weaker still. It is therefore not surprising that no trade-related and transport strategies address these issues. Inland Container Depots (ICDs) have been built, but are inadequately equipped, and in locations nearer the cities than the ports. Logistics operators, warehousing, trucking services and freight forwarders lag behind global standards.

Policy research should come up with recommendations to improve trade logistics with a clear definition of logistic service, logistic service business conditions, and responsibility limitation for logistic business entities. Measures to be taken to improve legal framework for development of logistics services and logistics operators in Vietnam also need to be addressed. The current regulations covering customs brokers, transport service providers, and operators of bonded warehouses need to be expanded to cover, in particular, multimodal transport operations.

Starting with an in-depth study of the current status and needs assessment regarding capacity, structure of, and services provided by inland container depots (ICDs), efforts should be made to develop an action plan for the ICD system as part of NAP to fill the current policy and infrastructure gaps. PPP should be an appropriate investment in logistics facilities.

Message 3 - Simplify Regulatory Procedures to Reduce Time and Cost and Improve Reliability of Cross Border Trade

Soft infrastructure for trade is as important as hard infrastructure. Empirical evidence shows that each day of delay at the border is equivalent to additional costs of 0.8 percent of the value of the freight. The current border management is slow and inconsistent, unresponsive and vulnerable to corruption. The policy priority should be to simplify regulatory processes and procedures and create a transparent environment to facilitate trade across the border, while reducing corruption.

Despite efforts to simplify procedures, they remain complex. Clearance times are among the highest in the region and risk management is inadequate, partly due to a high rate of physical inspections. Interventions should be directed at streamlining of procedures. This involves the modernization of Customs, and higher integration with other border management activities, as well as an improved transit regime. Greater transparency is desirable for inspection and control operations of border agencies.

A sound legal framework should be developed for the Customs modernization program. The Customs Law should be further amended to set an overall framework for business process simplification and risk management practices to meet international customs standards by: (i) applying the single stop inspection at border with risk based management; (ii) using the advance ruling system; (iii) launching the priority enterprises program; (iv) setting up a system of customs performance indicators; (v) improving the current service of customs brokers and post clearance audit; and (vi) using the non-instructive detection devices. A set of simplified procedures in accordance with the Revised Kyoto Convention should function within an IT integrated system to minimize paper work and interaction between shippers and customs officers.

A risk management system should be in place to improve compliance management. Related laws are to be revised to set the foundation for applying fully and consistently the principles of risk management instead of provisions for case-by-case specified or exempted inspection. Customs administration is expected to be reorganized, both the institutional set-up and the human capacity to adapt to risk management application.

It is crucial to develop and implement customs anti-corruption strategy to improve customer perception of the Customs services and integrity of the customs staff. Measures should be highlighted to specify a set of integrity standards for customs staff performance and strengthen the mechanism of cooperation and partnership between customs and traders through regular dialogues.
Customs is important, but regulating flows of goods across the border involves many other agencies, including Ministries of Agriculture, Health, Science and Technology, and Transport, and port authorities. Coordination among key stakeholders and their partnership with private sector is crucial to trade facilitation. Vietnam should put into operation in compliance with ASEAN commitments, a National Single Window system. Policy measures to be taken include: (i) issue regulatory framework (Decree) for coordinated processes and procedures for the NSW; (ii) set up an institutional mechanism to coordinate relevant agencies through the NSW National Steering Committee; and (iii) develop a single electronic window for submission of the documents required for cargo clearance and an integrated database for coordinating the activities of various agencies involved in border management.

Message 4 - Restructure Supply Chains to Capture Value and to Proactively Participate in Global Value Chains

All supply chains are not alike. Restructuring these chains needs to take into account their particular characteristics. This section discusses two broad types of supply chains - manufacturing and agriculture - both of which play important roles in Vietnam’s exports.

Manufacturing Supply Chains

As discussed in Chapter 6, the supply chain organization of the major manufacturing exports remains primitive generating for Vietnam’s producers and exporters very low value-added. Sixty percent of firms in the apparel industry are foreign vendor factories, while 38 percent of them are contract manufactures or original equipment manufacturers. Only two percent of the firms have design capability to be original design manufactures. None of the firms have their own brand to serve as original brand manufacturers. As such, the exports are heavily dependent on imported materials that negatively affect their ability to reduce lead-time and meet the flexibility of global market changes. Most of the firms have limited capacity for sourcing raw materials and depend on intermediaries (through their buyers’ agents and vendors) for both finding the supplies and receiving market. Many zones and clusters developed for particular industries like garments and footwear over the past decade and a half are located near major cities, which are crowded and face difficulties to expand or improve their access to labor sources. Reallocation will require access to the land, cater specifically to the needs of the light industries, offer efficient connectivity to the major seaports, and increases in skilled labor. Policy priorities are to address these weaknesses.

Cluster Development and Supporting Industries

The net export value is important, as is the degree of backward linkages. The level of backward integration is more important for sophisticated manufacturing than for resource-based supply chains. Developing strong supporting industries is a sound way to restructure supply chains of exported primary commodities to enhance their competitiveness. It also promotes Vietnam as an attractive subcontracting destination for FDI, supports private sector development, and reduces the trade imbalance. In this context, promoting the development of supporting industries enhances the production capabilities of domestic manufacturing industries to increase the local content of inputs and therefore capture higher value added. It should not be interpreted as an import substitution policy.

Supporting industries produce industrial supporting products such as components, accessories, spare parts, packaging products, and raw materials and have the additional benefit of consisting mainly of SMEs. Vibrant subcontracting industries will make Vietnam an attractive destination for FDI, raising the rate of local content, narrowing the trade deficit, and accelerating the process of industrialization and modernization.
Despite a series of Government Decisions,\textsuperscript{51} the supporting industries in Vietnam remain weak. Although the growth and strengthening of supporting industries are primarily private sector concerns, the government should promote its development through carefully considered preferential policies/treatment. A master plan for industrial cluster development that includes development of supporting industries will not only increase the production scale but also encourage greater use of domestic suppliers. The types of subcontracting to be promoted clearly depend on the selection of the prioritized industries already discussed. The clusters/zones should cater specifically to the needs of the industry, provide access to skilled labor and offer efficient connectivity to the major international gateways. Careful consideration should be given to coordinate policies to assist the industrial cluster development and supporting industries with policies that promote SME development, attract FDI, and improve current account deficits. The promotion of corporate partnerships between main and supporting industries as well as foreign-invested and domestic enterprises is essential. Lessons from international experience should be drawn in strategic planning for supporting industry growth. For example, the Law on Subcontracting Promotion of South Korea (1975) stipulated that in some industries, large firms are required to subcontract SMEs to supply intermediate goods and do not produce these goods themselves.

\section*{Agricultural Supply Chains}

\subsection*{Outbound Supply Chain}

The fact that rice is a political commodity has obstructed the operation of market signals and compromised the vitality of the sector. While food security is important, this has to be balanced against the loss of efficiency in a major export product (See Box 8.1). The preferences accorded to SOEs in this business only serve to entrench vested interests and further distance this industry from the market signals.

While G2G contracts ensure the large output for Vietnam's rice sector, these contracts, in practice, could lead to a number of adverse consequences. These include arbitrary allocation of export quotas and setting of floor prices to favour SOEs or companies of vested interests, the risk that importing governments may change their import strategies, reduced incentive for exporting companies to innovate and improve quality, and disconnecting farmers and exporters from market information/signals—a vital factor for value creation. The volume of rice exported through government contracts (G2G) (also known as concentrated export contracts) has been significantly large in recent years. It accounted for more than 70 percent of total rice exports in 2011, according to a TTFA survey.

Rather than acting as an agent of the government and serving the interests of vested interests, the Vietnam Food Association (VFA) should revert to its role as an industry association representing the legal interests of all its members. The allocation of export quotas between members needs to be made through a transparent bidding mechanism. The government should let the rice market develop based on market factors/signals. Rather than administratively intervene in the market, it should invest in building the national storage system to ensure the national reserve target and to stabilize prices as well as to establish a buffer fund to stabilize food prices. Companies can also rent this storage system to store rice while awaiting export contracts. Thus, rather than rely on G2G sales, the government should facilitate the participation of companies in signing rice export contracts directly in the global market. At the regional level, Vietnam needs to quickly participate in the association of regional rice exporters with Thailand, the Philippines and Myanmar to expand ASEAN rice linking, in order to develop high-quality rice brands instead of continuing to rely on the G2G contracts with lower quality and price.

\textsuperscript{51} Two important documents apply to supporting industries: Decision 34/2007/QD-BCN 2007 of the Ministry of Industry (now the Ministry of Industry and Trade) approved a development plan for supporting industry in 2010, with a vision to 2020, and Decision 12/2011/QD-TTg by Prime Minister issued February 22, 2011 contains policy decisions on developing a number of supporting industries.
Inbound supply chain

Fragmented land holdings leading to a small scale agricultural production, and backward technology are among the main obstacles for agricultural production contributing to low value added in agricultural exports. A supportive policy environment for agro-industrial production should be established to help restructure agricultural supply chains toward improving the quality and quality of exported goods.

Larger scale farming guarantees lower production cost as well as a larger volume with consistent quality to ensure stable production and trade. Policies that promote industrializing agricultural production by forming win-win partnership between famers and supporting enterprises will not only facilitate large-scale farming but also encourage the use of modern farming methods; reduce lead time and cost of intermediaries; help farmers access the market feedback information and develop new markets; apply standards to increase output quality, and improve logistics services and hence supply chain efficiency of the agricultural exports. Policy measures need to be taken to facilitate the legal process of joint ventures between farmers and enterprises, in particular in terms of land use rights and land consolidation. An awareness raising campaign, technical and financial support, and logistics services provision will facilitate the farmers to voluntarily adapt large scale farming in partnership with enterprises.

Development of spot and futures markets with well-functioning commodity exchange floors is one way to help farmers deal with seasonal fluctuation of the agricultural products and their global prices. This allows agriculture products to be produced and exported with better plans, on a larger scale, and with less lead costs (by middle traders). It helps increase the capital for production, enhance the quality of export goods, and modernize agricultural supply chains for higher value added.
The establishment of trading coffee can not immediately turn Vietnam into a reference channel for the world price of coffee, but it would partly reduce the status of the speculative price. In addition, a coffee trading floor is just one measure that could be used to promote coffee production and export. The government should pay special attention to this model, developing a master-plan and strategic policy for the center to connect the buyer to the sellers and making appropriate guiding regulations.

**Trade Finance**

Most of the trade businesses in Vietnam, in particular SMEs, face difficulties in obtaining funds for export-related investment, and in particular lack working capital. Although export activities in Vietnam generally receive policy support from the government, trade finance support from the government to date has been limited. Decree No. 75/2011/ND-CP on the government’s investment credit and the export credit issued on August 30, 2011 guided implementation of policy lending to some trade activities through the Vietnam Development Bank (VDB). This provides for export credit, up to 85 percent of the export contract value including pre-shipment credit, credit provided after delivery, government’s credit for foreign importers, with market reference rate. VDB, a non-professional export credit agency, has adopted limited forms of support for export activities. Apart from trade SOEs, most exports firms have to borrow from formal commercial banks with normal lending conditions. An in-depth study, taking international experiences into account, should be made to support more robust policies in financing trade activities and also be part of the NAP for trade competitiveness enhancement.

**8.3 Policy Framework Matrix**

The policy recommendations above are drawn together in a policy framework matrix. This matrix links objectives to actions, their expected output, and identifies the agencies involved in implementation.
Table 8.2: Vietnam Trade Competitiveness - Policy Priorities

<table>
<thead>
<tr>
<th>Objective</th>
<th>Policy Action</th>
<th>Lead Agency</th>
<th>Time</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Build sound policy framework and institutional capacity to implement the national action plan for trade competitiveness enhancement.</td>
<td>Formulate the National Action Plan (NAP) based on: (i) SEDS 2011-2020; (ii) The Import and Export of goods strategy in 2011-2020, with orientations toward 2030; (iii) Transport Development Strategy until 2020, Vision to 2030; (iv) Various Industrial Sector Strategies; (v) Customs Strategy until 2020. (The Plan should be based on policy priorities of transport and logistics infrastructure and services, regulatory procedures, supply chain (as in Objective 2, 3 and 4).</td>
<td>NCIEC / MOT / MOIT</td>
<td>2014</td>
<td>The national action plan for trade competitiveness enhancement.</td>
</tr>
<tr>
<td>Strengthen Policy Coordination and Implementation Capacity.</td>
<td>Appoint a body at national level to effectively manage the NAP implementation. The body should be empowered to ensure national competitiveness and interests will be top of criteria for selective national industrialization priorities.</td>
<td>MOIT / MOF / MPI / NCIEC / MOT / OOG</td>
<td>2014-2016</td>
<td>Appropriate institutional mechanism to manage effectively, formulate and implement NAP.</td>
</tr>
<tr>
<td>Linking trade competitiveness to industrial policy.</td>
<td>Select strategic priority and spearhead areas for carrying out industrialization.</td>
<td>MOIT / MPI</td>
<td>2013-2014</td>
<td>NAP with selected prioritized areas.</td>
</tr>
<tr>
<td>2. Develop transport and logistics infrastructure and services to improve domestic production linkages and international connections for export growth</td>
<td>Review and revise transport sector strategy to include long term vision on development clusters, international gateways and corridors, and internal interfaces to effectively support and enhance trade competitiveness.</td>
<td>MOT / MOIT / NCIEC</td>
<td>2013</td>
<td>Revised Transport Strategy.</td>
</tr>
<tr>
<td><strong>Objective</strong></td>
<td><strong>Policy Action</strong></td>
<td><strong>Lead Agency</strong></td>
<td><strong>Time</strong></td>
<td><strong>Outputs</strong></td>
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<tr>
<td>Improve transport corridors to connect major development clusters with major international gateways.</td>
<td>Priority given to develop and implement a plan to improve transport corridors for port complex in HCMC, Hai-Phong, and Ba-Ria – Vung-Tau.</td>
<td>MOT</td>
<td>2013-2016</td>
<td>Efficient and effective transport corridors linking major ports in HCMC, Hai-Phong, and Ba-Ria – Vung-Tau.</td>
</tr>
<tr>
<td>Strengthen Public and Private Sector Partnership.</td>
<td>Improve legal framework and revenue guarantee policy for BOT, BTO, PPP projects in transport infrastructure investment in order to mobilize financial resources outside the state budget to invest more effectively in improvement of transport and infrastructure and logistics services.</td>
<td>MOT / MOF</td>
<td>2013-2014</td>
<td>Legal support framework for effective PPP in transport infrastructure &amp; logistics services.</td>
</tr>
<tr>
<td>Develop trade logistics strategy and policy framework for logistics services.</td>
<td>Project to improve logistics with clear definition of logistics service, logistic service business conditions and responsibility limitation for logistic business entities; Improve legal framework for development of logistics services and logistics operators in Vietnam.</td>
<td>MOIT / MOT / MARD</td>
<td>2013-2014</td>
<td>Implementation of Project on Trade Logistics.</td>
</tr>
<tr>
<td>Multimodal transport Development.</td>
<td>Provide legal support for multimodal transport development</td>
<td>MOT</td>
<td>2013</td>
<td>Improved multimodal transport.</td>
</tr>
<tr>
<td>Provide ICD or Logistic Centers in support of port operations and industrial development.</td>
<td>Review ICDs location and services and encourage establishment of ICDs becoming real Logistic Centers near port and as support of future nearby industrial development.</td>
<td>MOT, private investors and Global Logistics Companies, Other government agencies concerned.</td>
<td>2014-2015</td>
<td>New set of effective ICDs and Logistic Centers located near international gateways.</td>
</tr>
<tr>
<td>Objective</td>
<td>Policy Action</td>
<td>Lead Agency</td>
<td>Time</td>
<td>Outputs</td>
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<tr>
<td>3. Simplify regulatory procedures to reduce time and cost for cross border trade.</td>
<td>Revise the Customs Law and Implementing regulations to set overall framework for business process simplification to meet international customs standards by: (i) applying the single stop inspection at border; (ii) using the advance ruling system; (iii) launching the priority enterprises program; (iv) setting up a system of customs performance indicators; (v) improving the current service of customs brokers and post clearance audit; and (vi) using the non-instructive detection devices.</td>
<td>GDC (MOF)</td>
<td>2013</td>
<td>Amended Customs Law and implementing regulations.</td>
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<td></td>
<td>Issue Decree on IT Customs to apply electronic declaration and clearance as soon as practicable.</td>
<td>GDC (MOF)</td>
<td>2012</td>
<td>Decree on IT Customs.</td>
</tr>
<tr>
<td></td>
<td>Complete development IT systems for Customs (VNACCS) for implementing a paperless customs clearance process that minimize the interaction between shippers and customs officers.</td>
<td>GDC (MOF)</td>
<td>2013-2014</td>
<td>VNACCS expedited.</td>
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<td></td>
<td>Amend Customs Law and implementing regulations to apply fully and consistently principles of risk management instead of provisions case-by-case specified or exempted inspection.</td>
<td>GDC (MOF)</td>
<td>2013</td>
<td>Amended Customs Law and implementing regulations.</td>
</tr>
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<td></td>
<td>Complete computerized risk management with a central department for developing and maintaining risk profiles, sharing of intelligence from other customs organizations and incorporating scanning into the risk assessment process</td>
<td>GDC (MOF)</td>
<td>2014-2015</td>
<td>Organizational restructure with fully functional RM department.</td>
</tr>
<tr>
<td>Objective</td>
<td>Policy Action</td>
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<tr>
<td>Apply risk management to improve compliance management.</td>
<td>Organization of separate units dealing with RM at central and local customs departments; apply RM in all border management agencies.</td>
<td>GDC (MOF)</td>
<td>2014-2015</td>
<td>RM applied in all border management agencies.</td>
</tr>
<tr>
<td>Implement customs anti-corruption strategy to improve customer perception of Customs services and integrity of customs staff.</td>
<td>Develop and implement anti-corruption action plan for Vietnam Customs; specify a set of integrity standards on performance for customs staff; and create the mechanism of cooperation and partnership between customs and traders.</td>
<td>GDC (MOF)</td>
<td>2013-2016</td>
<td>Anti-corruption action plan developed and implemented.</td>
</tr>
<tr>
<td>Implement National Single Window (NSW) and ASEAN Single Window (ASW).</td>
<td>(i) issues regulatory framework (Decree) for coordinated processes and procedures for the NSW; (ii) set up an institutional mechanism to coordinate relevant agencies through the NSW National Steering Committee; (iii) develop a single electronic window for submission of documents required for cargo clearance and an integrated database for coordinating the activities of various agencies involved in border management.</td>
<td>MOF / MARD / MOIT / MOT / MOH / MOFA</td>
<td>2013-2014</td>
<td>NSW and ASW implemented.</td>
</tr>
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</table>

4. Restructure supply chains to capture value and proactively participate in global value chains

4.1 Restructure supply chains to capture value and proactively participate in global value chains

<table>
<thead>
<tr>
<th>Objective</th>
<th>Policy Action</th>
<th>Time</th>
<th>Outputs</th>
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<tbody>
<tr>
<td>Develop Clusters to attract FDI for production of goods for exports</td>
<td>Revise current program for establishing export processing zones. Develop zones as part of a program for developing industrial clusters and providing more catered supplies and efficient logistics services. Determine the value proposition to be offered to the target market, and select and design sites so as to maximize the value proposition.</td>
<td>2014</td>
<td>Increase economic activity and level of employment in the manufacturing sector.</td>
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<td>Objective</td>
<td>Policy Action</td>
<td>Lead Agency</td>
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<tr>
<td>Develop supplier networks and supporting industries.</td>
<td>Assess opportunities for improving the quality of inputs currently supplied to export manufacturers and for diversifying into more sophisticated inputs and prepare a strategy, jointly with the private sector for realizing these opportunities; Based on this assessment, develop an action plan for development of supporting industries.</td>
<td>MARD / MOIT / MOF</td>
<td>2013-2016</td>
</tr>
<tr>
<td>Develop local contract manufacturing industry.</td>
<td>Prepare a strategy and marketing plan for diversification and improvement in quality of the products exported by each manufacturing sector, e.g. garments, footwear, electronics. Strengthen supply chain management including sourcing of inputs and developing new distribution channels for products. Identify opportunities for backwards integration to reduce the time and cost for delivering products to market and for downstream processing to increase the value of products.</td>
<td>MARD / MOIT / MOF</td>
<td>2014</td>
</tr>
<tr>
<td>4.2. Restructure agricultural supply chains toward diversifying products and opening up new markets (processing and outbound).</td>
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<td>Develop contract farming arrangements and strengthen role of farmers’ associations.</td>
<td>Strengthen mechanism for contract enforcement, specifically related to the sale of agricultural commodities in order to reduce counterparty risk. Develop pro forma documents for allocating obligations and liabilities together with a mechanism for adjusting the price paid to reflect changes in commodity prices between when the contract is signed and when the transaction is completed.</td>
<td></td>
<td>2013-2014</td>
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<td>Objective</td>
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<tr>
<td>Diversify exports of agricultural commodities based on quality and variety.</td>
<td>Develop systems for traceability and certification of crops to allow differentiation and identity preservation. Create PP institutions to set and enforce grading standards for rice and coffee.</td>
<td>MOIT / MOT</td>
<td>2013-2016</td>
</tr>
<tr>
<td>Establish a network of 3rd party storage facilities for rice.</td>
<td>Develop a legal and financial framework to support the formation of a network of 3rd party rice storage facilities to act as an intermediary in transactions between farmers, rice mills and exporters. Provide a legal framework for warehouse receipts and enforcement of forward contracts in order to reduce counterparty risk. Establish an independent agency to document and disseminate rice market information. Harmonize rice quality and grading standards for use in forward contracts and link to price indices for Thai rice.</td>
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<td>2013-2014</td>
</tr>
<tr>
<td>Build and develop trade marks for Vietnam agricultural products.</td>
<td>Analyze the situation of the branding of Vietnam’s agricultural products and develop a program to create stronger brands.</td>
<td>MARD</td>
<td>2014-2016</td>
</tr>
<tr>
<td>Establish policy environment to support agro-industrial investment.</td>
<td>Assess factors inhibiting agro-industrial investment including restrictions/transaction costs for land acquisition (inhibiting vertical integration); fragmentation of existing production structures that limit horizontal integration (i.e. cooperatives) and constraints on competition due to presence of state farms and SOEs. Develop a program to overcome these impediments and facilitate agro-industrial development.</td>
<td>MARD / MOIT / MOF</td>
<td>2013-2016</td>
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<td>Extend the PPP model in investment for large farming and the model &quot;cánh đồng mẫu lớn&quot;.</td>
<td></td>
<td>MARD</td>
<td>2013-2014</td>
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<td>Objective</td>
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<tr>
<td>4.3 Restructure agricultural supply chains toward improving quality and diversification of products from supply side</td>
<td>Improve the quality of agricultural products to meet international standards. Review related legislative documents and propose appropriate revised regulations to improve SPS controls (VietGAP, NAFIQAD etc.) on seafood export.</td>
<td>MOIT / MOST / MARD</td>
<td>2013-2016</td>
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<tr>
<td></td>
<td>Develop spot and forward/futures market(s) / transaction floors to help farmers deal with seasonal production and global price fluctuation. Project to learn lessons from the failure of piloted transaction floor for coffee in Daklak, analyze efficiency of spot markets and main factors for their successful operation, and recommend policies to promote this model and regulatory framework for management.</td>
<td>MARD / MOIT</td>
<td>2013-2016</td>
</tr>
</tbody>
</table>
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